

Ser His Val Glu Cys Ala Arg Phe Ser Pro Asp Gly Pro Val Phe Gly  
245 250 255

His Trp Val Cys  
260

<210> 1214  
<211> 95  
<212> PRT  
<213> Homo sapiens

<400> 1214  
Lys Gln Asn Ile Pro Tyr Val Ser Phe Ser Ile Gly Gln Lys His Phe  
1 5 10 15  
Asp Thr Met Phe Val Lys His Leu Trp Arg Gly Ala Leu Leu Asn Ala  
20 25 30  
Ala Ser Ala Val Asn Pro Gly Gly Lys Gly Ser Ala Ser Ser Gln Glu  
35 40 45  
Pro Ser Pro Ser Ile Asn Arg Glu Leu Lys Gln Ala Phe Phe Phe Ser  
50 55 60  
Tyr Arg Lys Ala Ala Ile Val Gln Gly His Ile Met Gly Leu Phe Ala  
65 70 75 80  
Leu Ile Gly Phe Gln Met Cys Met Ala Lys Arg Glu Met Trp Ala  
85 90 95

<210> 1215  
<211> 365  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (1)  
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1215  
Xaa His Gly Ile Gly Val Thr Ala Thr Asn Phe Thr Thr His Asn Ile  
1 5 10 15  
Pro Gln Thr Phe Thr Thr Ala Ile Arg Cys Thr Lys Cys Gly Lys Gly  
20 25 30

Val Asp Asn Met Pro Glu Leu His Lys His Ile Leu Ala Cys Ala Ser  
35 40 45

Ala Ser Asp Lys Lys Arg Tyr Thr Pro Lys Lys Asn Pro Val Pro Leu  
50 55 60

Lys Gln Thr Val Gln Pro Lys Asn Gly Val Val Val Leu Asp Asn Ser  
65 70 75 80

Gly Lys Asn Ala Phe Arg Arg Met Gly Gln Pro Lys Arg Leu Asn Phe  
85 90 95

Ser Val Glu Leu Ser Lys Met Ser Ser Asn Lys Leu Lys Leu Asn Ala  
100 105 110

Leu Lys Lys Lys Asn Gln Leu Val Gln Lys Ala Ile Leu Gln Lys Asn  
115 120 125

Lys Ser Ala Lys Gln Lys Ala Asp Leu Lys Asn Ala Cys Glu Ser Ser  
130 135 140

Ser His Ile Cys Pro Tyr Cys Asn Arg Glu Phe Thr Tyr Ile Gly Ser  
145 150 155 160

Leu Asn Lys His Ala Ala Phe Ser Cys Pro Lys Lys Pro Leu Ser Pro  
165 170 175

Pro Lys Lys Lys Val Ser His Ser Ser Lys Lys Gly Gly His Ser Ser  
180 185 190

Pro Ala Ser Ser Asp Lys Asn Ser Asn Ser Asn His Arg Arg Arg Thr  
195 200 205

Ala Asp Ala Glu Ile Lys Met Gln Ser Met Gln Thr Pro Leu Gly Lys  
210 215 220

Thr Arg Ala Arg Ser Ser Gly Pro Thr Gln Val Pro Leu Pro Ser Ser  
225 230 235 240

Ser Phe Arg Ser Lys Gln Asn Val Lys Phe Ala Ala Ser Val Lys Ser  
245 250 255

Lys Lys Pro Ser Ser Ser Ser Leu Arg Asn Ser Ser Pro Ile Arg Met  
260 265 270

Ala Lys Ile Thr His Val Glu Gly Lys Lys Pro Lys Ala Val Ala Lys  
275 280 285

Asn His Ser Ala Gln Leu Ser Ser Lys Thr Ser Arg Ser Leu His Val  
290 295 300

Arg Val Gln Lys Ser Lys Ala Val Leu Gln Ser Lys Ser Thr Leu Ala  
305 310 315 320

Ser Lys Lys Arg Thr Asp Arg Phe Asn Ile Lys Ser Arg Glu Arg Ser  
325 330 335

Gly Gly Pro Val Thr Arg Ser Leu Gln Leu Ala Ala Ala Asp Leu  
340 345 350

Ser Glu Asn Lys Arg Glu Asp Gly Ser Ala Ser Arg Ser  
355 360 365

<210> 1216

<211> 558

<212> PRT

<213> Homo sapiens

<400> 1216

Ala His Ala Ser Ala His Ala Ala Thr Pro Arg Arg Leu Trp Ala Leu  
1 5 10 15

Ser Ile Val Ser Phe Ser Ser Ala Gly Ala Ala Met Ala Ala Val Lys  
20 25 30

Thr Leu Asn Pro Lys Ala Glu Val Ala Arg Ala Gln Ala Ala Leu Ala  
35 40 45

Val Asn Ile Ser Ala Ala Arg Gly Leu Gln Asp Val Leu Arg Thr Asn  
50 55 60

Leu Gly Pro Lys Gly Thr Met Lys Met Leu Val Ser Gly Ala Gly Asp  
65 70 75 80

Ile Lys Leu Thr Lys Asp Gly Asn Val Leu Leu His Glu Met Gln Ile  
85 90 95

Gln His Pro Thr Ala Ser Leu Ile Ala Lys Val Ala Thr Ala Gln Asp  
100 105 110

Asp Ile Thr Gly Asp Gly Thr Thr Ser Asn Val Leu Ile Ile Gly Glu  
115 120 125

Leu Leu Lys Gln Ala Asp Leu Tyr Ile Ser Glu Gly Leu His Pro Arg  
130 135 140

Ile Ile Thr Glu Gly Phe Glu Ala Ala Lys Glu Lys Ala Leu Gln Phe  
145 150 155 160

Leu Glu Glu Val Lys Val Ser Arg Glu Met Asp Arg Glu Thr Leu Ile

165	170	175
Asp Val Ala Arg Thr Ser Leu Arg Thr Lys Val His Ala Glu Leu Ala		
180	185	190
Asp Val Leu Thr Glu Ala Val Val Asp Ser Ile Leu Ala Ile Lys Lys		
195	200	205
Gln Asp Glu Pro Ile Asp Leu Phe Met Ile Glu Ile Met Glu Met Lys		
210	215	220
His Lys Ser Glu Thr Asp Thr Ser Leu Ile Arg Gly Leu Val Leu Asp		
225	230	235
		240
His Gly Ala Arg His Pro Asp Met Lys Lys Arg Val Glu Asp Ala Tyr		
245	250	255
Ile Leu Thr Cys Asn Val Ser Leu Glu Tyr Glu Lys Thr Glu Val Asn		
260	265	270
Ser Gly Phe Phe Tyr Lys Ser Ala Glu Glu Arg Glu Lys Leu Val Lys		
275	280	285
Ala Glu Arg Lys Phe Ile Glu Asp Arg Val Lys Lys Ile Ile Glu Leu		
290	295	300
Lys Arg Lys Val Cys Gly Asp Ser Asp Lys Gly Phe Val Val Ile Asn		
305	310	315
		320
Gln Lys Gly Ile Asp Pro Phe Ser Leu Asp Ala Leu Ser Lys Glu Gly		
325	330	335
Ile Val Ala Leu Arg Arg Ala Lys Arg Arg Asn Met Glu Arg Leu Thr		
340	345	350
Leu Ala Cys Gly Gly Val Ala Leu Asn Ser Phe Asp Asp Leu Ser Pro		
355	360	365
Asp Cys Leu Gly His Ala Gly Leu Val Tyr Glu Tyr Thr Leu Gly Glu		
370	375	380
Glu Lys Phe Thr Phe Ile Glu Lys Cys Asn Asn Pro Arg Ser Val Thr		
385	390	395
		400
Leu Leu Ile Lys Gly Pro Asn Lys His Thr Leu Thr Gln Ile Lys Asp		
405	410	415
Ala Val Arg Asp Gly Leu Arg Ala Val Lys Asn Ala Ile Asp Asp Gly		
420	425	430
Cys Val Val Pro Gly Ala Gly Ala Val Glu Val Ala Met Ala Glu Ala		



435 440 445  
Leu Ile Lys His Lys Pro Ser Val Lys Gly Arg Ala Gln Leu Gly Val  
450 455 460  
Gln Ala Phe Ala Asp Ala Leu Leu Ile Ile Pro Lys Val Leu Ala Gln  
465 470 475 480  
Asn Ser Gly Phe Asp Leu Gln Glu Thr Leu Val Lys Ile Gln Ala Glu  
485 490 495  
His Ser Glu Ser Gly Gln Leu Val Gly Val Asp Leu Asn Thr Gly Glu  
500 505 510  
Pro Met Val Ala Ala Glu Val Gly Val Trp Asp Asn Tyr Cys Val Lys  
515 520 525  
Lys Gln Leu Leu His Ser Cys Thr Val Ile Ala Thr Asn Ile Leu Leu  
530 535 540  
Val Asp Glu Ile Met Arg Ala Gly Met Ser Ser Leu Lys Gly  
545 550 555

<210> 1217

<211> 226

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (98)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (145)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (146)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (185)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE  
<222> (192)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (199)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (206)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (212)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (218)  
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1217  
Leu Lys Val Leu Trp Cys Phe Leu Ile His Val Gln Gly Ser Ile Arg  
1 5 10 15  
Gln Phe Ala Ala Cys Leu Val Leu Thr Asp Phe Gly Ile Ala Val Phe  
20 25 30  
Glu Ile Pro His Gln Glu Ser Arg Gly Ser Ser Gln His Ile Leu Ser  
35 40 45  
Ser Leu Arg Phe Val Phe Cys Phe Pro His Gly Asp Leu Thr Glu Phe  
50 55 60  
Gly Phe Leu Met Pro Glu Leu Cys Leu Val Leu Lys Val Arg His Ser  
65 70 75 80  
Glu Asn Thr Leu Phe Ile Ile Ser Asp Ala Ala Asn Leu His Glu Phe  
85 90 95  
His Xaa Asp Leu Arg Ser Cys Phe Ala Pro Gln His Met Ala Met Leu  
100 105 110  
Cys Ser Pro Ile Leu Tyr Gly Ser His Thr Ser Leu Gln Glu Phe Leu  
115 120 125  
Arg Gln Leu Leu Thr Phe Tyr Lys Val Ala Gly Gly Cys Gln Glu Arg  
130 135 140

Xaa Xaa Gly Cys Phe Pro Val Tyr Leu Val Tyr Ser Asp Lys Arg Met  
145 150 155 160

Val Gln Thr Ala Ala Gly Asp Tyr Ser Gly Asn Ile Glu Trp Pro Ala  
165 170 175

Ala His Ser Val Gln Pro Cys Gly Xaa Pro Ala Ala Arg Pro Leu Xaa  
180 185 190

Pro Ser Ser Pro Pro Pro Xaa Pro Thr Gly Cys Cys Ser Xaa Pro Ser  
195 200 205

Thr Gln Ser Xaa Gln Ser Arg Leu Gln Xaa His Ala Gln Thr Val Glu  
210 215 220

Pro Lys  
225

<210> 1218

<211> 255

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (2)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1218

Cys Xaa Leu Pro Gly Cys Glu Ala His Ile Ile Pro Phe Ile Leu Asp  
1 5 10 15

Glu Ile Gly Ala Asp Ile Glu Asp Arg His Ile Val Val Ser Cys Ala  
20 25 30

Ala Gly Val Thr Ile Ser Ser Ile Glu Lys Lys Leu Ser Ala Phe Arg  
35 40 45

Pro Ala Pro Arg Val Ile Arg Cys Met Thr Asn Thr Pro Val Val Val  
50 55 60

Arg Glu Gly Ala Thr Val Tyr Ala Thr Gly Thr His Ala Gln Val Glu  
65 70 75 80

Asp Gly Arg Leu Met Glu Gln Leu Leu Ser Ser Val Gly Phe Cys Thr  
85 90 95

Glu Val Glu Glu Asp Leu Ile Asp Ala Val Thr Gly Leu Ser Gly Ser

100										105										110									
Gly	Pro	Ala	Tyr	Ala	Phe	Thr	Ala	Leu	Asp	Ala	Leu	Ala	Asp	Gly	Gly														
	115						120						125																
Val	Lys	Met	Gly	Leu	Pro	Arg	Arg	Leu	Ala	Val	Arg	Leu	Gly	Ala	Gln														
	130					135					140																		
Ala	Leu	Leu	Gly	Ala	Ala	Lys	Met	Leu	Leu	His	Ser	Glu	Gln	His	Pro														
145					150					155					160														
Gly	Gln	Leu	Lys	Asp	Asn	Val	Ser	Ser	Pro	Gly	Gly	Ala	Thr	Ile	His														
			165						170					175															
Ala	Leu	His	Val	Leu	Glu	Ser	Gly	Gly	Phe	Arg	Ser	Leu	Leu	Ile	Asn														
		180						185						190															
Ala	Val	Glu	Ala	Ser	Cys	Ile	Arg	Thr	Arg	Glu	Leu	Gln	Ser	Met	Ala														
	195						200						205																
Asp	Gln	Glu	Gln	Val	Ser	Pro	Ala	Ala	Ile	Lys	Lys	Thr	Ile	Leu	Asp														
	210					215						220																	
Lys	Val	Lys	Leu	Asp	Ser	Pro	Ala	Gly	Thr	Ala	Leu	Ser	Pro	Ser	Gly														
225				230						235					240														
His	Thr	Lys	Leu	Leu	Pro	Arg	Ser	Leu	Ala	Pro	Ala	Gly	Lys	Asp															
			245						250					255															

<210> 1219

<211> 590

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (17)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (116)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (127)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (131)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (134)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (158)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (161)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (213)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (216)  
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1219  
Ala Gln Val Arg Ala Pro Pro Trp Leu Cys Cys Pro Arg Ala Trp Thr  
1 5 10 15  
Xaa Cys Pro Pro Pro Ala Cys Arg Arg Ala Gly Arg Pro Thr Arg Pro  
20 25 30  
Ser Cys Ser Ala Val Thr Ala Pro Gly Ser Gly Gly Leu Val Ala Gly  
35 40 45  
Gly Pro Glu Ala Phe Ala Ala Phe Leu Arg Arg Glu Arg Leu Ala Arg  
50 55 60  
Phe Leu Asn Pro Asp Glu Val His Ala Ile Leu Arg Ala Ala Glu Arg  
65 70 75 80  
Pro Gly Glu Glu Gly Ala Ala Ala Ala Ala Ala Arg Thr Arg Ser  
85 90 95  
Ala Pro Arg Thr Thr Ala Leu Arg Ala Leu Leu Pro Arg Ala Val Gly  
100 105 110

Pro Gly Ala Xaa Ala Val Gly Ala Trp Leu Ala Arg Leu Leu Xaa Gly  
115 120 125

Arg Leu Xaa Arg Arg Xaa Ala Cys Arg Asp Ala Leu Pro Ala Pro Arg  
130 135 140

Arg Trp Arg Arg Trp Pro Leu Arg Leu Gln Gly Arg Ser Xaa Pro His  
145 150 155 160

Xaa Arg Ser Ala Arg Glu Val Ile Ala Val Val Met Asp Val Phe Thr  
165 170 175

Asp Ile Asp Ile Phe Arg Asp Leu Gln Glu Ile Cys Arg Lys Gln Gly  
180 185 190

Val Ala Val Tyr Ile Leu Leu Asp Gln Ala Leu Leu Ser Gln Phe Leu  
195 200 205

Asp Met Cys Met Xaa Leu Lys Xaa His Pro Glu Gln Glu Lys Leu Met  
210 215 220

Thr Val Arg Thr Ile Thr Gly Asn Ile Tyr Tyr Ala Arg Ser Gly Thr  
225 230 235 240

Lys Ile Ile Gly Lys Val His Glu Lys Phe Thr Leu Ile Asp Gly Ile  
245 250 255

Arg Val Ala Thr Gly Ser Tyr Ser Phe Thr Trp Thr Asp Gly Lys Leu  
260 265 270

Asn Ser Ser Asn Leu Val Ile Leu Ser Gly Gln Val Val Glu His Phe  
275 280 285

Asp Leu Glu Phe Arg Ile Leu Tyr Ala Gln Ser Lys Pro Ile Ser Pro  
290 295 300

Lys Leu Leu Ser His Phe Gln Ser Ser Asn Lys Phe Asp His Leu Thr  
305 310 315 320

Asn Arg Lys Pro Gln Ser Lys Glu Leu Thr Leu Gly Asn Leu Leu Arg  
325 330 335

Met Arg Leu Ala Arg Leu Ser Ser Thr Pro Arg Lys Ala Asp Leu Asp  
340 345 350

Pro Glu Met Pro Ala Glu Gly Lys Ala Glu Arg Lys Pro His Asp Cys  
355 360 365

Glu Ser Ser Thr Val Ser Glu Glu Asp Tyr Phe Ser Ser His Arg Asp  
370 375 380

Glu Leu Gln Ser Arg Lys Ala Ile Asp Ala Ala Thr Gln Thr Glu Pro  
385 390 395 400

Gly Glu Glu Met Pro Gly Leu Ser Val Ser Glu Val Gly Thr Gln Thr  
405 410 415

Ser Ile Thr Thr Ala Cys Ala Gly Thr Gln Thr Ala Val Ile Thr Arg  
420 425 430

Ile Ala Ser Ser Gln Thr Thr Ile Trp Ser Arg Ser Thr Thr Thr Gln  
435 440 445

Thr Asp Met Asp Glu Asn Ile Leu Phe Pro Arg Gly Thr Gln Ser Thr  
450 455 460

Glu Gly Ser Pro Val Ser Lys Met Ser Val Ser Arg Ser Ser Ser Leu  
465 470 475 480

Lys Ser Ser Ser Ser Val Ser Ser Gln Gly Ser Val Ala Ser Ser Thr  
485 490 495

Gly Ser Pro Ala Ser Ile Arg Thr Thr Asp Phe His Asn Pro Gly Tyr  
500 505 510

Pro Lys Tyr Leu Gly Thr Pro His Leu Glu Leu Tyr Leu Ser Asp Ser  
515 520 525

Leu Arg Asn Leu Asn Lys Glu Arg Gln Phe His Phe Ala Gly Ile Arg  
530 535 540

Ser Arg Leu Asn His Met Leu Ala Met Leu Ser Arg Arg Thr Leu Phe  
545 550 555 560

Thr Glu Asn His Leu Gly Leu His Ser Gly Asn Phe Ser Arg Val Asn  
565 570 575

Leu Leu Ala Val Arg Asp Val Ala Leu Tyr Pro Ser Tyr Gln  
580 585 590

<210> 1220

<211> 451

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (29)

<223> Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1220

Val Glu Ile Ser Gly Pro Arg Pro Val Asp Trp Glu Val Arg Pro Pro  
1 5 10 15

Leu Gln Arg Leu Gly Leu Cys Phe Gly Ser Cys Arg Xaa Gln Gln Ser  
20 25 30

Leu Pro Gly Arg Gly Ser Ala Asn Leu Leu Pro Ser Val Arg Ser Glu  
35 40 45

Ser Ala Val Leu Ser Asp Cys Val Gly Gly Phe Pro Gly Arg Ser Ser  
50 55 60

Val Arg Ala Trp Ile Ala Gly Pro Arg Cys Thr Pro Ala Ser Pro Thr  
65 70 75 80

Arg Val Leu Ser Leu Ser Trp Arg Leu Phe Asn Ser Ala Ser Leu Leu  
85 90 95

Leu Leu Ala Thr Ser Thr Ser Gly Ser Glu Cys Arg Phe Pro Arg Ser  
100 105 110

Pro Arg Ala Arg Glu Arg Gly Ile Pro Asp Cys Glu Arg Leu Leu Val  
115 120 125

Arg Arg Ser Cys Trp Arg Ser Gly Asp Pro Arg Pro Ala Gly Pro Ala  
130 135 140

Gly His Ala Ala Gly Ala Phe Ser Thr Pro Gln Tyr Leu Gly Gly Thr  
145 150 155 160

Ala Met Val Leu Leu His Val Lys Arg Gly Asp Glu Ser Gln Phe Leu  
165 170 175

Leu Gln Ala Pro Gly Ser Thr Glu Leu Glu Glu Leu Thr Val Gln Val  
180 185 190

Ala Arg Val Tyr Asn Gly Arg Leu Lys Val Gln Arg Leu Cys Ser Glu  
195 200 205

Met Glu Glu Leu Ala Glu His Gly Ile Phe Leu Pro Pro Asn Met Gln  
210 215 220

Gly Leu Thr Asp Asp Gln Ile Glu Glu Leu Lys Leu Lys Asp Glu Trp  
225 230 235 240

Gly Glu Lys Cys Val Pro Ser Gly Gly Ala Val Phe Lys Lys Asp Asp  
245 250 255

Ile Gly Arg Arg Asn Gly Gln Ala Pro Asn Glu Lys Met Lys Gln Val



260 265 270

Leu Lys Lys Thr Ile Glu Glu Ala Lys Ala Ile Ile Ser Lys Lys Gln  
275 280 285

Val Glu Ala Gly Val Cys Val Thr Met Glu Met Val Lys Asp Ala Leu  
290 295 300

Asp Gln Leu Arg Gly Ala Val Met Ile Val Tyr Pro Met Gly Leu Pro  
305 310 315 320

Pro Tyr Asp Pro Ile Arg Met Glu Phe Glu Asn Lys Glu Asp Leu Ser  
325 330 335

Gly Thr Gln Ala Gly Leu Asn Val Ile Lys Glu Ala Glu Ala Gln Leu  
340 345 350

Trp Trp Ala Ala Lys Glu Leu Arg Arg Thr Lys Lys Leu Ser Asp Tyr  
355 360 365

Val Gly Lys Asn Glu Lys Thr Lys Ile Ile Ala Lys Ile Gln Gln Arg  
370 375 380

Gly Gln Gly Ala Pro Ala Arg Glu Pro Ile Ile Ser Ser Glu Glu Gln  
385 390 395 400

Lys Gln Leu Met Leu Tyr Tyr His Arg Arg Gln Glu Glu Leu Lys Arg  
405 410 415

Leu Glu Glu Asn Asp Asp Ala Tyr Leu Asn Ser Pro Trp Ala Asp  
420 425 430

Asn Thr Ala Leu Lys Arg His Phe His Gly Val Lys Asp Ile Lys Trp  
435 440 445

Arg Pro Arg  
450

<210> 1221

<211> 85

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (14)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1221

Ala Glu Pro Gly Leu Ser Asn Pro Trp Gly Ala Gly Ser Xaa Ala Leu  
1 5 10 15

Gly His Thr Trp Leu Pro Ala Pro Met Val Pro Val Pro Trp Asn Gly  
20 25 30

Asp Gly Gln Phe Trp Gly Gln Met Trp Cys Ser Gly Ile Gln Ser His  
35 40 45

Phe Leu Pro Gly His Glu Leu Ser Gln Arg Pro Leu Gln Pro His Ser  
50 55 60

Ala Pro Thr Tyr Leu Gly Thr Pro Ala Gly Ala Arg Glu Ala Pro Gly  
65 70 75 80

Gly Leu Gly Pro Lys  
85

<210> 1222

<211> 120

<212> PRT

<213> Homo sapiens

<400> 1222

Gly Leu Pro Glu His Val Val Pro Arg Leu Leu Gln Gly Val Glu Val  
1 5 10 15

Ser Trp Gly Trp Pro Arg Pro Arg Leu Leu Ser Gln Gly Glu Ala Ala  
20 25 30

Thr Asp Ser His Pro Thr Ala Leu Leu Lys Arg Met Phe Ala Val Val  
35 40 45

Gly Gly Val Pro Val Pro Thr Leu Pro Gly Thr Arg Pro Trp Gly Thr  
50 55 60

Leu Ala Gln Gly Cys Leu Gly Pro Ala Ser Cys Ala Ala Lys Val Gly  
65 70 75 80

Gly Pro His Pro Lys Thr Asn Pro Gly Pro Arg Pro Leu Glu Ala Arg  
85 90 95

Ala Ser Leu His Gly Leu Arg Gly Val Gly Ile Ser Pro Gln Ser Asp  
100 105 110

Leu Ala Ser Glu Leu Phe Ser Arg  
115 120

<210> 1223  
<211> 228  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (164)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (204)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (212)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (215)  
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1223  
Ala Glu Thr His Phe Ser Leu Pro Glu Phe Glu Pro Pro Phe Pro Ser  
1 5 10 15  
Ser Arg Ser Pro Thr Pro Gly Ala Met Asp Pro Phe Thr Glu Lys Leu  
20 25 30  
Leu Glu Arg Thr Arg Ala Arg Arg Glu Asn Leu Gln Arg Lys Met Ala  
35 40 45  
Glu Arg Pro Thr Ala Ala Pro Arg Ser Met Thr His Ala Lys Arg Ala  
50 55 60  
Arg Gln Pro Leu Ser Glu Ala Ser Asn Gln Gln Pro Leu Ser Gly Gly  
65 70 75 80  
Glu Glu Lys Ser Cys Thr Lys Pro Ser Pro Ser Lys Lys Arg Cys Ser  
85 90 95  
Asp Asn Thr Glu Val Glu Val Ser Asn Leu Glu Asn Lys Gln Pro Val  
100 105 110  
Glu Ser Thr Ser Ala Lys Ser Cys Ser Pro Ser Pro Val Ser Pro Gln  
115 120 125

Val Gln Pro Gln Ala Ala Asp Thr Ile Ser Asp Ser Val Ala Val Pro  
130 135 140

Ala Ser Leu Leu Gly Met Arg Arg Gly Leu Asn Ser Arg Leu Glu Ala  
145 150 155 160

Thr Ala Ala Xaa Ser Val Lys Thr Arg Met Gln Lys Leu Ala Glu Gln  
165 170 175

Arg Arg Arg Trp Asp Asn Asp Asp Met Thr Asp Asp Ile Pro Glu Ser  
180 185 190

Ser Leu Phe Ser Pro Met Pro Ser Glu Glu Lys Xaa Ala Phe Pro Ser  
195 200 205

Gln Thr Ser Xaa Phe Gln Xaa Ala Phe Gly Asn Phe Gln Leu Ala Lys  
210 215 220

Lys Gly Ala Arg  
225

<210> 1224

<211> 178

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (6)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (26)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (142)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1224

Val Asp Cys Gly Asn Xaa Ala Ala Lys Trp Phe Thr Asn Phe Leu Lys  
1 5 10 15

Thr Glu Ala Tyr Arg Leu Val Gln Phe Xaa Thr Asn Met Lys Gly Arg  
20 25 30

Thr Ser Arg Lys Leu Leu Pro Thr Leu Asp Gln Asn Phe Gln Val Ala

35 40 45  
Tyr Pro Asp Tyr Cys Pro Leu Leu Ile Met Thr Asp Ala Ser Leu Val  
50 55 60  
Asp Leu Asn Thr Arg Met Glu Lys Lys Met Lys Met Glu Asn Phe Arg  
65 70 75 80  
Pro Asn Ile Val Val Thr Gly Cys Asp Ala Phe Glu Glu Asp Thr Trp  
85 90 95  
Asp Glu Leu Leu Ile Gly Ser Val Glu Val Lys Lys Val Met Ala Cys  
100 105 110  
Pro Arg Cys Ile Leu Thr Thr Val Asp Pro Asp Thr Gly Val Ile Asp  
115 120 125  
Arg Lys Gln Pro Leu Asp Thr Leu Lys Ser Tyr Arg Leu Xaa Asp Pro  
130 135 140  
Ser Glu Arg Glu Leu Tyr Lys Leu Ser Pro Leu Phe Gly Ile Tyr Tyr  
145 150 155 160  
Ser Val Glu Lys Ile Gly Ser Leu Arg Val Gly Asp Pro Val Tyr Arg  
165 170 175  
Met Val

&lt;210&gt; 1225

&lt;211&gt; 64

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1225

Arg Asn Ile Trp Lys Arg Gln Lys Thr Lys Lys Glu Glu Lys Arg Ser  
1 5 10 15  
Leu Leu Asp Thr Leu Leu Lys Tyr Asn His Ile Asn Ile Leu Ser Tyr  
20 25 30  
Phe Leu Pro Ala Phe Leu Gly Gln Ile Leu Val Gly Phe Tyr Ile Val  
35 40 45  
Glu Ile Val Leu Phe Ile Gln Phe Tyr Thr Leu Phe His Leu Thr Leu  
50 55 60

<210> 1226  
<211> 33  
<212> PRT  
<213> Homo sapiens

<400> 1226  
Lys Gly Asn Lys Ser Trp Ser Ser Thr Ala Val Ala Ala Ala Leu Glu  
1 5 10 15  
Leu Val Asp Pro Pro Gly Cys Arg Asn Val Thr Ile Ser Thr Cys Cys  
20 25 30  
Pro

<210> 1227  
<211> 402  
<212> PRT  
<213> Homo sapiens

<400> 1227  
Asp Gln Ala Gly Pro Ala Ser Ala Glu Gln Leu His Ala Gly Pro Ala  
1 5 10 15  
Thr Glu Glu Pro Gly Pro Cys Leu Ser Gln Gln Leu His Ser Ala Ser  
20 25 30  
Ala Glu Asp Thr Pro Val Val Gln Leu Ala Ala Glu Thr Pro Thr Ala  
35 40 45  
Glu Ser Lys Glu Arg Ala Leu Asn Ser Ala Ser Thr Ser Leu Pro Thr  
50 55 60  
Ser Cys Pro Gly Ser Glu Pro Val Pro Thr His Gln Gln Gly Gln Pro  
65 70 75 80  
Ala Leu Glu Leu Lys Glu Glu Ser Phe Arg Asp Pro Ala Glu Val Leu  
85 90 95  
Gly Thr Gly Ala Glu Val Asp Tyr Leu Glu Gln Phe Gly Thr Ser Ser  
100 105 110  
Phe Lys Glu Ser Ala Leu Arg Lys Gln Ser Leu Tyr Leu Lys Phe Asp  
115 120 125  
Pro Leu Leu Arg Asp Ser Pro Gly Arg Pro Val Pro Val Ala Thr Glu

130                      135                      140  
 Thr Ser Ser Met His Gly Ala Asn Glu Thr Pro Ser Gly Arg Pro Arg  
 145                      150                      155                      160  
 Glu Ala Lys Leu Val Glu Phe Asp Phe Leu Gly Ala Leu Asp Ile Pro  
                     165                      170                      175  
 Val Pro Gly Pro Pro Pro Gly Val Pro Ala Pro Gly Gly Pro Pro Leu  
                     180                      185                      190  
 Ser Thr Gly Pro Ile Val Asp Leu Leu Gln Tyr Ser Gln Lys Asp Leu  
                     195                      200                      205  
 Asp Ala Val Val Lys Ala Thr Gln Glu Glu Asn Arg Glu Leu Arg Ser  
                     210                      215                      220  
 Arg Cys Glu Glu Leu His Gly Lys Asn Leu Glu Leu Gly Lys Ile Met  
 225                      230                      235                      240  
 Asp Arg Phe Glu Glu Val Val Tyr Gln Ala Met Glu Glu Val Gln Lys  
                     245                      250                      255  
 Gln Lys Glu Leu Ser Lys Ala Glu Ile Gln Lys Val Leu Lys Glu Lys  
                     260                      265                      270  
 Asp Gln Leu Thr Thr Asp Leu Asn Ser Met Glu Lys Ser Phe Ser Asp  
                     275                      280                      285  
 Leu Phe Lys Arg Phe Glu Lys Gln Lys Glu Val Ile Glu Gly Tyr Arg  
                     290                      295                      300  
 Lys Asn Glu Glu Ser Leu Lys Lys Cys Val Glu Asp Tyr Leu Ala Arg  
 305                      310                      315                      320  
 Ile Thr Gln Glu Gly Gln Arg Tyr Gln Ala Leu Lys Ala His Ala Glu  
                     325                      330                      335  
 Glu Lys Leu Gln Leu Ala Asn Glu Glu Ile Ala Gln Val Arg Ser Lys  
                     340                      345                      350  
 Ala Gln Ala Glu Ala Leu Ala Leu Gln Ala Ser Leu Arg Lys Glu Gln  
                     355                      360                      365  
 Met Arg Ile Gln Ser Leu Glu Lys Thr Val Glu Gln Lys Thr Lys Glu  
                     370                      375                      380  
 Asn Glu Glu Leu Thr Arg Ile Cys Asp Asp Leu Ile Ser Lys Met Glu  
 385                      390                      395                      400  
 Lys Ile

<210> 1228  
<211> 460  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (75)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (147)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (435)  
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1228  
Lys Gly Ala Gly Arg Cys Arg Leu Ser Lys Ile Gly Ala Thr Arg Arg  
1 5 10 15  
Pro Pro Pro Ala Arg Val Arg Val Ala Val Arg Leu Arg Pro Phe Val  
20 25 30  
Asp Gly Thr Ala Gly Ala Ser Asp Pro Pro Cys Val Arg Gly Met Asp  
35 40 45  
Ser Cys Ser Leu Glu Ile Ala Asn Trp Arg Asn His Gln Glu Thr Leu  
50 55 60  
Lys Tyr Gln Phe Asp Ala Phe Tyr Gly Glu Xaa Ser Thr Gln Gln Asp  
65 70 75 80  
Ile Tyr Ala Gly Ser Val Gln Pro Ile Leu Arg His Leu Leu Glu Gly  
85 90 95  
Gln Asn Ala Ser Val Leu Ala Tyr Gly Pro Thr Gly Ala Gly Lys Thr  
100 105 110  
His Thr Met Leu Gly Ser Pro Glu Gln Pro Gly Val Ile Pro Arg Ala  
115 120 125  
Leu Met Asp Leu Leu Gln Leu Thr Arg Glu Glu Gly Ala Glu Gly Arg  
130 135 140



Pro Trp Xaa Leu Ser Val Thr Met Ser Tyr Leu Glu Ile Tyr Gln Glu  
145 150 155 160

Lys Val Leu Asp Leu Leu Asp Pro Ala Ser Gly Asp Leu Val Ile Arg  
165 170 175

Glu Asp Cys Arg Gly Asn Ile Leu Ile Pro Gly Leu Ser Gln Lys Pro  
180 185 190

Ile Ser Ser Phe Ala Asp Phe Glu Arg His Phe Leu Pro Ala Ser Arg  
195 200 205

Asn Arg Thr Val Gly Ala Thr Arg Leu Asn Gln Arg Ser Ser Arg Ser  
210 215 220

His Ala Val Leu Leu Val Lys Val Asp Gln Arg Glu Arg Leu Ala Pro  
225 230 235 240

Phe Arg Gln Arg Glu Gly Lys Leu Tyr Leu Ile Asp Leu Ala Gly Ser  
245 250 255

Glu Asp Asn Arg Arg Thr Gly Asn Lys Gly Leu Arg Leu Lys Glu Ser  
260 265 270

Gly Ala Ile Asn Thr Ser Leu Phe Val Leu Gly Lys Val Val Asp Ala  
275 280 285

Leu Asn Gln Gly Leu Pro Arg Val Pro Tyr Arg Asp Ser Lys Leu Thr  
290 295 300

Arg Leu Leu Gln Asp Ser Leu Gly Gly Ser Ala His Ser Ile Leu Ile  
305 310 315 320

Ala Asn Ile Ala Pro Glu Arg Arg Phe Tyr Leu Asp Thr Val Ser Ala  
325 330 335

Leu Asn Phe Ala Ala Arg Ser Lys Glu Val Ile Asn Arg Pro Phe Thr  
340 345 350

Asn Glu Ser Leu Gln Pro His Ala Leu Gly Pro Val Lys Leu Ser Gln  
355 360 365

Lys Glu Leu Leu Gly Pro Pro Glu Ala Lys Arg Ala Arg Gly Pro Glu  
370 375 380

Glu Glu Glu Ile Gly Ser Pro Glu Pro Met Ala Ala Pro Ala Ser Ala  
385 390 395 400

Ser Gln Lys Leu Ser Pro Leu Gln Lys Leu Ser Ser Met Asp Pro Ala  
405 410 415

Met Leu Glu Arg Leu Leu Gln Leu Gly Pro Ser Ala Cys Leu Pro Gly  
420 425 430

Glu Pro Xaa Gly Pro Ser Val Glu Tyr Pro Lys Ala Arg Ala Asp Gly  
435 440 445

Ala Asn Glu Asp Ser Arg Arg Glu Gly Pro Arg Asp  
450 455 460

<210> 1229

<211> 239

<212> PRT

<213> Homo sapiens

<400> 1229

Ala Arg Gly Arg Leu Ala Phe Pro Cys Gly Arg Pro Asp Tyr Trp Ala  
1 5 10 15

Leu Ala Arg Arg Thr Ile Gly Thr Gly Leu Glu Arg Lys Ala Leu Gly  
20 25 30

Leu Pro Gly Ser Ser Glu Arg Pro Thr Ser Val Ser Ser Tyr Gln Gly  
35 40 45

Thr Arg Ile Arg Cys Ser Asn Pro Gly Gly Lys Met Arg Pro Leu Thr  
50 55 60

Glu Glu Glu Thr Arg Val Met Phe Glu Lys Ile Ala Lys Tyr Ile Gly  
65 70 75 80

Glu Asn Leu Gln Leu Leu Val Asp Arg Pro Asp Gly Thr Tyr Cys Phe  
85 90 95

Arg Leu His Asn Asp Arg Val Tyr Tyr Val Ser Glu Lys Ile Met Lys  
100 105 110

Leu Ala Ala Asn Ile Ser Gly Asp Lys Leu Val Ser Leu Gly Thr Cys  
115 120 125

Phe Gly Lys Phe Thr Lys Thr His Lys Phe Arg Leu His Val Thr Ala  
130 135 140

Leu Asp Tyr Leu Ala Pro Tyr Ala Lys Tyr Lys Val Trp Ile Lys Pro  
145 150 155 160

Gly Ala Glu Gln Ser Phe Leu Tyr Gly Asn His Val Leu Lys Ser Gly  
165 170 175

Leu Gly Arg Ile Thr Glu Asn Thr Ser Gln Tyr Gln Gly Val Val Val  
180 185 190

Tyr Ser Met Ala Asp Ile Pro Leu Gly Phe Gly Val Ala Ala Lys Ser  
195 200 205

Thr Gln Asp Cys Arg Lys Val Asp Pro Met Ala Ile Val Val Phe His  
210 215 220

Gln Ala Asp Ile Gly Glu Tyr Val Arg His Glu Glu Thr Leu Thr  
225 230 235

<210> 1230

<211> 276

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (57)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (253)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1230

Ser Ala Val Val Ser Gly Cys Arg Val Arg Ser Cys Thr Ser Phe Ser  
1 5 10 15

Asp Glu Pro Met Thr Gly Trp Met Ala Ala Ala Val Val Thr Leu Met  
20 25 30

Ile Arg Met Cys Phe Ser Val Tyr Thr Met Leu Ser Glu Ser Cys Gln  
35 40 45

Arg Met Val Ile Val Gly Tyr Gly Xaa Leu Leu Arg Arg Gln Ala Glu  
50 55 60

Leu Asp Gly Met Pro Ala Ile Asn Ala Lys Arg Val Tyr Arg Ile Met  
65 70 75 80

Arg Gln Asn Ala Leu Leu Leu Glu Arg Lys Pro Ala Val Pro Pro Ser  
85 90 95

Lys Arg Ala His Thr Gly Arg Val Ala Val Lys Glu Ser Asn Gln Arg  
100 105 110

Trp Cys Ser Asp Gly Phe Glu Phe Cys Cys Asp Asn Gly Glu Arg Leu  
 115 120 125  
 Arg Val Thr Phe Ala Leu Asp Cys Cys Asp Arg Glu Ala Leu His Trp  
 130 135 140  
 Ala Val Thr Thr Gly Gly Phe Asn Ser Glu Thr Val Gln Asp Val Met  
 145 150 155 160  
 Leu Gly Ala Val Glu Arg Arg Phe Gly Asn Asp Leu Pro Ser Ser Pro  
 165 170 175  
 Val Glu Trp Leu Thr Asp Asn Gly Ser Cys Tyr Arg Ala Asn Glu Thr  
 180 185 190  
 Arg Gln Phe Ala Arg Met Leu Gly Leu Glu Pro Lys Asn Thr Ala Val  
 195 200 205  
 Arg Ser Pro Glu Ser Asn Gly Ile Ala Glu Ser Phe Val Lys Thr Ile  
 210 215 220  
 Lys Arg Asp Tyr Ile Ser Ile Met Pro Lys Pro Asp Gly Leu Thr Ala  
 225 230 235 240  
 Ala Lys Asn Leu Ala Glu Ala Phe Glu His Tyr Asn Xaa Trp His Pro  
 245 250 255  
 His Ser Ala Leu Gly Tyr Arg Ser Pro Arg Glu Tyr Leu Arg His Gly  
 260 265 270  
 Leu Val Met Gly  
 275

&lt;210&gt; 1231

&lt;211&gt; 296

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (6)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1231

Lys Thr Ile His Leu Xaa Thr Phe Ile Val Leu Ile Arg Arg Leu Asp  
 1 5 10 15  
 Cys Asn Phe Asp Ile Lys Val Leu Asn Ala Gln Arg Ala Gly Tyr Lys  
 20 25 30

Ala Ala Ile Val His Asn Val Asp Ser Asp Asp Leu Ile Ser Met Gly  
35 40 45

Ser Asn Asp Ile Glu Val Leu Lys Lys Ile Asp Ile Pro Ser Val Phe  
50 55 60

Ile Gly Glu Ser Ser Ala Asn Ser Leu Lys Asp Glu Phe Thr Tyr Glu  
65 70 75 80

Lys Gly Gly His Leu Ile Leu Val Pro Glu Phe Ser Leu Pro Leu Glu  
85 90 95

Tyr Tyr Leu Ile Pro Phe Leu Ile Ile Val Gly Ile Cys Leu Ile Leu  
100 105 110

Ile Val Ile Phe Met Ile Thr Lys Phe Val Gln Asp Arg His Arg Ala  
115 120 125

Arg Arg Asn Arg Leu Arg Lys Asp Gln Leu Lys Lys Leu Pro Val His  
130 135 140

Lys Phe Lys Lys Gly Asp Glu Tyr Asp Val Cys Ala Ile Cys Leu Asp  
145 150 155 160

Glu Tyr Glu Asp Gly Asp Lys Leu Arg Ile Leu Pro Cys Ser His Ala  
165 170 175

Tyr His Cys Lys Cys Val Asp Pro Trp Leu Thr Lys Thr Lys Lys Thr  
180 185 190

Cys Pro Val Cys Lys Gln Lys Val Val Pro Ser Gln Gly Asp Ser Asp  
195 200 205

Ser Asp Thr Asp Ser Ser Gln Glu Glu Asn Glu Val Thr Glu His Thr  
210 215 220

Pro Leu Leu Arg Pro Leu Ala Ser Val Ser Ala Gln Ser Phe Gly Ala  
225 230 235 240

Leu Ser Glu Ser Arg Ser His Gln Asn Met Thr Glu Ser Ser Asp Tyr  
245 250 255

Glu Glu Asp Asp Asn Glu Asp Thr Asp Ser Ser Asp Ala Glu Asn Glu  
260 265 270

Ile Asn Glu His Asp Val Val Val Gln Leu Gln Pro Asn Gly Glu Arg  
275 280 285

Asp Tyr Asn Ile Ala Asn Thr Val  
290 295

&lt;210&gt; 1232

&lt;211&gt; 69

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1232

Asn Gln His Lys Glu Tyr Asp Lys Thr Pro Val Gly Asn Pro Glu Cys  
1 5 10 15

Ser Gly Pro Ser Cys Gly Leu Phe Tyr Gly Phe Met Lys Gly Pro Cys  
20 25 30

Pro His Gly Gly Asp His Gly Leu Ala Cys Gly Val Leu Gly Asp Gly  
35 40 45

Cys Leu Leu Ser Ser Ser Pro His Pro Ala Ser Cys Trp His Leu Gly  
50 55 60

Glu Glu Ser Ser Lys  
65

&lt;210&gt; 1233

&lt;211&gt; 423

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1233

Leu Tyr Arg Gln Asp Tyr Asn Pro Lys Pro Lys Pro Ser Asn Glu Ile  
1 5 10 15

Thr Arg Glu Tyr Ile Pro Lys Ile Gly Met Thr Thr Tyr Lys Ile Val  
20 25 30

Pro Pro Lys Ser Leu Glu Ile Ser Lys Asp Trp Gln Ser Glu Thr Ile  
35 40 45

Glu Tyr Lys Asp Asp Gln Asp Met His Ala Leu Gly Lys Lys His Thr  
50 55 60

His Glu Asn Val Lys Glu Thr Ala Ile Gln Thr Glu Asp Ser Ala Ile  
65 70 75 80

Ser Glu Ser Pro Glu Glu Pro Leu Pro Asn Leu Lys Pro Lys Pro Asn  
85 90 95

Leu Arg Thr Glu His Gln Val Pro Ser Ser Val Ser Ser Pro Asp Asp

100 105 110

Ala Met Val Ser Pro Leu Lys Pro Ala Pro Lys Met Thr Arg Asp Thr  
115 120 125

Gly Thr Ala Pro Phe Ala Pro Asn Leu Glu Glu Ile Asn Asn Ile Leu  
130 135 140

Glu Ser Lys Phe Lys Ser Arg Ala Ser Asn Ala Gln Ala Lys Pro Ser  
145 150 155 160

Ser Phe Phe Leu Gln Met Gln Lys Arg Val Ser Gly His Tyr Val Thr  
165 170 175

Ser Ala Ala Ala Lys Ser Val His Ala Ala Pro Asn Pro Ala Pro Lys  
180 185 190

Glu Leu Thr Asn Lys Glu Ala Glu Arg Asp Met Leu Pro Ser Pro Glu  
195 200 205

Gln Thr Leu Ser Pro Leu Ser Lys Met Pro His Ser Val Pro Gln Pro  
210 215 220

Leu Val Glu Lys Thr Asp Asp Asp Val Ile Gly Gln Ala Pro Ala Glu  
225 230 235 240

Ala Ser Pro Pro Pro Ile Ala Pro Lys Pro Val Thr Ile Pro Ala Ser  
245 250 255

Gln Val Ser Thr Gln Asn Leu Lys Thr Leu Lys Thr Phe Gly Ala Pro  
260 265 270

Arg Pro Tyr Ser Ser Ser Gly Pro Ser Pro Phe Ala Leu Ala Val Val  
275 280 285

Lys Arg Ser Gln Ser Phe Ser Lys Glu Arg Thr Glu Ser Pro Ser Ala  
290 295 300

Ser Ala Leu Val Gln Pro Pro Ala Asn Thr Glu Glu Gly Lys Thr His  
305 310 315 320

Ser Val Asn Lys Phe Val Asp Ile Pro Gln Leu Gly Val Ser Asp Lys  
325 330 335

Glu Asn Asn Ser Ala His Asn Glu Gln Asn Ser Gln Ile Pro Thr Pro  
340 345 350

Thr Asp Gly Pro Ser Phe Thr Val Met Arg Gln Ser Ser Leu Thr Phe  
355 360 365

Gln Ser Ser Asp Pro Glu Gln Met Arg Gln Ser Leu Leu Thr Ala Ile

370

375

380

Arg Ser Gly Glu Ala Ala Ala Lys Leu Lys Arg Val Thr Ile Pro Ser  
 385 390 395 400

Asn Thr Ile Ser Val Asn Gly Arg Ser Arg Leu Ser His Ser Met Ser  
 405 410 415

Pro Asp Ala Gln Asp Gly His  
 420

&lt;210&gt; 1234

&lt;211&gt; 231

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (225)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1234

Thr Ala Lys Lys Asn His Lys Lys Leu Thr Ile Asn Pro Cys Glu Ile  
 1 5 10 15

Ser Gly Cys Pro Lys Pro Thr Gln Ile Ile Ala Gly Asp Arg Pro Asp  
 20 25 30

Asn His Trp Leu His Tyr Asp Ser Lys Thr Ile Pro Arg Thr Lys Lys  
 35 40 45

Glu Trp Glu Ser Ser Cys Phe Val Glu Lys Thr His Trp Gly Tyr Tyr  
 50 55 60

Thr Trp Pro Lys Asn Met Val Val Tyr Ala Gly Val Glu Glu Gln Pro  
 65 70 75 80

Lys Leu Gly Arg Ser Arg Glu Asp Met Thr Glu Ala Glu Gln Ile Ile  
 85 90 95

Phe Asp His Phe Ser Asp Pro Lys Phe Val Glu Gln Leu Ile Thr Phe  
 100 105 110

Leu Ser Leu Glu Asp Arg Lys Gly Lys Asp Lys Phe Asn Pro Arg Arg  
 115 120 125

Phe Cys Leu Phe Lys Gly Ile Phe Arg Asn Phe Asp Asp Ala Phe Leu  
 130 135 140



Pro Val Leu Lys Pro His Leu Glu His Leu Val Ala Asp Ser His Glu  
 145 150 155 160

Ser Thr Gln Arg Cys Val Ala Glu Ile Ile Ala Gly Leu Ile Arg Gly  
 165 170 175

Ser Lys His Trp Thr Phe Glu Lys Val Glu Lys Leu Trp Glu Leu Leu  
 180 185 190

Cys Pro Leu Leu Arg Thr Ala Leu Ser Asn Ile Thr Val Glu Thr Tyr  
 195 200 205

Asn Asp Trp Gly Ala Cys Ile Ala Thr Ser Cys Glu Ser Arg Asp Pro  
 210 215 220

Xaa Glu Thr Ser Leu Ala Phe  
 225 230

<210> 1235  
 <211> 302  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (2)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (226)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 1235  
 Arg Xaa Gly Ile Pro Gly Ser Thr His Ala Ser Gly Ala Val Ala Leu  
 1 5 10 15

Tyr Phe Ile Asp Lys Leu Ala Leu Arg Ala Gly Asn Glu Lys Glu Asp  
 20 25 30

Gly Glu Ala Ala Asp Thr Val Gly Cys Cys Ser Leu Arg Val Glu His  
 35 40 45

Val Gln Leu His Pro Glu Ala Asp Gly Cys Gln His Val Val Glu Phe  
 50 55 60

Asp Phe Leu Gly Lys Asp Cys Ile Arg Tyr Tyr Asn Arg Val Pro Val  
 65 70 75 80

Glu Lys Pro Val Tyr Lys Asn Leu Gln Leu Phe Met Glu Asn Lys Asp  
                             85                            90                            95  
 Pro Arg Asp Asp Leu Phe Asp Arg Leu Thr Thr Thr Ser Leu Asn Lys  
                             100                            105                            110  
 His Leu Gln Glu Leu Met Asp Gly Leu Thr Ala Lys Val Phe Arg Thr  
                             115                            120                            125  
 Tyr Asn Ala Ser Ile Thr Leu Gln Glu Gln Leu Arg Ala Leu Thr Arg  
                             130                            135                            140  
 Ala Glu Asp Ser Ile Ala Ala Lys Ile Leu Ser Tyr Asn Arg Ala Asn  
 145                            150                            155                            160  
 Arg Val Val Ala Ile Leu Cys Asn His Gln Arg Ala Thr Pro Ser Thr  
                             165                            170                            175  
 Phe Glu Lys Ser Met Gln Asn Leu Gln Thr Lys Ile Gln Ala Lys Lys  
                             180                            185                            190  
 Glu Gln Val Ala Glu Ala Arg Ala Glu Leu Arg Arg Ala Arg Ala Glu  
                             195                            200                            205  
 His Lys Ala Gln Gly Asp Gly Lys Ser Arg Ser Val Leu Glu Lys Lys  
                             210                            215                            220  
 Arg Xaa Leu Leu Glu Lys Leu Gln Glu Gln Leu Ala Gln Leu Ser Val  
 225                            230                            235                            240  
 Gln Ala Thr Asp Lys Glu Glu Asn Lys Gln Val Ala Leu Gly Thr Ser  
                             245                            250                            255  
 Lys Leu Asn Tyr Leu Asp Pro Arg Ile Ser Ile Ala Trp Cys Lys Arg  
                             260                            265                            270  
 Phe Arg Val Pro Val Glu Lys Ile Tyr Ser Lys Thr Gln Arg Glu Arg  
                             275                            280                            285  
 Phe Ala Trp Ala Leu Ala Met Ala Gly Glu Asp Phe Glu Phe  
                             290                            295                            300

&lt;210&gt; 1236

&lt;211&gt; 63

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1236

Ala Val Leu Val Ser Leu Glu Tyr Leu Ser Asp Arg Ile Lys Leu Lys

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1           5           10           15
Leu Ser Gly Lys Leu Pro Val Tyr Ile Leu His Leu Val Tyr Arg Leu
      20           25           30
Phe Cys Leu Ala His Lys Ala Phe Tyr Tyr Leu Ser Leu Cys Gln His
      35           40           45
Leu Arg Ile Lys Asn Phe Pro Asp Ile Gln Ile Ser Asp Phe Asn
      50           55           60

<210> 1237
<211> 239
<212> PRT
<213> Homo sapiens

<400> 1237
Val Tyr Leu Leu Gly Ser Trp Leu Arg Arg His Ser Ser Tyr Thr Glu
  1           5           10           15
Glu Met Gly Glu Glu Ala Asn Asp Asp Lys Lys Pro Thr Thr Lys Phe
      20           25           30
Glu Leu Glu Arg Glu Thr Glu Leu Arg Phe Glu Val Glu Ala Ser Gln
      35           40           45
Ser Val Gln Leu Glu Leu Leu Thr Gly Met Ala Glu Ile Phe Gly Thr
      50           55           60
Glu Leu Thr Arg Asn Lys Lys Phe Thr Phe Asp Ala Gly Ala Lys Val
      65           70           75           80
Ala Val Phe Thr Trp His Gly Cys Ser Val Gln Leu Ser Gly Arg Thr
      85           90           95
Glu Val Ala Tyr Val Ser Lys Asp Thr Pro Met Leu Leu Tyr Leu Asn
      100           105           110
Thr His Thr Ala Leu Glu Gln Met Arg Arg Gln Ala Glu Lys Glu Glu
      115           120           125
Glu Arg Gly Pro Arg Val Met Val Val Gly Pro Thr Asp Val Gly Lys
      130           135           140
Ser Thr Val Cys Arg Leu Leu Leu Asn Tyr Ala Val Arg Leu Gly Arg
      145           150           155           160
Arg Pro Thr Tyr Val Glu Leu Asp Val Gly Gln Gly Ser Val Ser Ile
      165           170           175

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Pro Gly Thr Met Gly Ala Leu Tyr Ile Glu Arg Pro Ala Asp Val Glu  
 180 185 190

Glu Gly Phe Ser Ile Gln Ala Pro Leu Val Tyr His Phe Gly Ser Thr  
 195 200 205

Thr Pro Gly Thr Asn Ile Lys Leu Tyr Asn Lys Ile Thr Ser Arg Leu  
 210 215 220

Ala Asp Val Phe Asn Gln Arg Cys Glu Val Asn Arg Arg His Leu  
 225 230 235

<210> 1238

<211> 315

<212> PRT

<213> Homo sapiens

<400> 1238

Leu Leu Thr Arg Asn Met Asp Arg Leu Leu Arg Leu Gly Gly Gly Met  
 1 5 10 15

Pro Gly Leu Gly Gln Gly Pro Pro Thr Asp Ala Pro Ala Val Asp Thr  
 20 25 30

Ala Glu Gln Val Tyr Ile Ser Ser Leu Ala Leu Leu Lys Met Leu Lys  
 35 40 45

His Gly Arg Ala Gly Val Pro Met Glu Val Met Gly Leu Met Leu Gly  
 50 55 60

Glu Phe Val Asp Asp Tyr Thr Val Arg Val Ile Asp Val Phe Ala Met  
 65 70 75 80

Pro Gln Ser Gly Thr Gly Val Ser Val Glu Ala Val Asp Pro Val Phe  
 85 90 95

Gln Ala Lys Met Leu Asp Met Leu Lys Gln Thr Gly Arg Pro Glu Met  
 100 105 110

Val Val Gly Trp Tyr His Ser His Pro Gly Phe Gly Cys Trp Leu Ser  
 115 120 125

Gly Val Asp Ile Asn Thr Gln Gln Ser Phe Glu Ala Leu Ser Glu Arg  
 130 135 140

Ala Val Ala Val Val Val Asp Pro Ile Gln Ser Val Lys Gly Lys Val  
 145 150 155 160

Val Ile Asp Ala Phe Arg Leu Ile Asn Ala Asn Met Met Val Leu Gly  
                     165                    170                    175  
 His Glu Pro Arg Gln Thr Thr Ser Asn Leu Gly His Leu Asn Lys Pro  
                     180                    185                    190  
 Ser Ile Gln Ala Leu Ile His Gly Leu Asn Arg His Tyr Tyr Ser Ile  
                     195                    200                    205  
 Thr Ile Asn Tyr Arg Lys Asn Glu Leu Glu Gln Lys Met Leu Leu Asn  
                     210                    215                    220  
 Leu His Lys Lys Ser Trp Met Glu Gly Leu Thr Leu Gln Asp Tyr Ser  
 225                    230                    235                    240  
 Glu His Cys Lys His Asn Glu Ser Val Val Lys Glu Met Leu Glu Leu  
                     245                    250                    255  
 Ala Lys Asn Tyr Asn Lys Ala Val Glu Glu Glu Asp Lys Met Thr Pro  
                     260                    265                    270  
 Glu Gln Leu Ala Ile Lys Asn Val Gly Lys Gln Asp Pro Lys Arg His  
                     275                    280                    285  
 Leu Glu Glu His Val Asp Val Leu Met Thr Ser Asn Ile Val Gln Cys  
                     290                    295                    300  
 Leu Ala Ala Met Leu Asp Thr Val Val Phe Lys  
 305                    310                    315

&lt;210&gt; 1239

&lt;211&gt; 283

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (253)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (259)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1239

Leu Arg Gly Ser Asp Ala Gly Ser Gly Asp Glu Val Ala Ala Gly Gly  
   1                    5                    10                    15

Ser Arg Ala Val Ala Ala Ala Ala Leu Pro Arg Ser Gly Arg Val Gly  
 20 25 30  
 Ala Ser Gly Pro Ala Ser Ala Pro Leu His Pro Arg Leu Ala Glu Pro  
 35 40 45  
 Gly Phe Ser Ala Ala Ala Gly Leu Val Arg Arg Ser Gln Val Arg Gly  
 50 55 60  
 Val His Pro Leu Gly Arg Val Leu Gly Ala Arg Leu Gly Gln Arg Val  
 65 70 75 80  
 Val Leu Val Ala Leu Ala Gly Arg Gly Ala Ala Ala Val Pro Ala Leu  
 85 90 95  
 His Ala Arg Gln Leu Pro Ala Arg Leu Gln Leu Arg Arg Leu Arg Thr  
 100 105 110  
 Ala Val His Cys Ala Leu Leu Pro Pro Gly Glu Trp Ala Asp Leu Phe  
 115 120 125  
 Gln Ala Ala Gly Ala Lys Tyr Val Val Leu Thr Thr Lys His His Glu  
 130 135 140  
 Gly Phe Thr Asn Trp Pro Ser Pro Val Ser Trp Asn Trp Asn Ser Lys  
 145 150 155 160  
 Asp Val Gly Pro His Arg Asp Leu Val Gly Glu Leu Gly Thr Ala Leu  
 165 170 175  
 Arg Lys Arg Asn Ile Arg Tyr Gly Leu Tyr His Ser Leu Leu Glu Trp  
 180 185 190  
 Phe His Pro Leu Tyr Leu Leu Asp Lys Lys Asn Gly Phe Lys Thr Gln  
 195 200 205  
 His Phe Val Ser Ala Lys Thr Met Pro Glu Leu Tyr Asp Leu Val Asn  
 210 215 220  
 Ser Tyr Lys Pro Asp Leu Ile Trp Ser Asp Gly Glu Trp Glu Cys Pro  
 225 230 235 240  
 Asp Thr Tyr Trp Asn Ser Thr Asn Phe Leu Ser Trp Xaa Tyr Asn Asp  
 245 250 255  
 Ser Pro Xaa Lys Val Ser Val Gly Ser Leu Arg Ala Arg Thr Leu Phe  
 260 265 270  
 Tyr Ser Thr Trp Glu Leu Ser Val Cys His Met  
 275 280

<210> 1240  
 <211> 180  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (4)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (7)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (175)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 1240  
 Thr Thr Ser Xaa Glu Arg Xaa Leu Thr Gly Pro Glu Pro Leu Arg Arg  
   1                  5                  10                  15  
 Arg Arg Leu Cys Ser Arg Gln Leu Ala Pro Ala Ala Met Pro Thr Thr  
           20                  25                  30  
 Ile Glu Arg Glu Phe Glu Glu Leu Asp Thr Gln Arg Arg Trp Gln Pro  
       35                  40                  45  
 Leu Tyr Leu Glu Ile Arg Asn Glu Ser His Asp Tyr Pro His Arg Val  
   50                  55                  60  
 Ala Lys Phe Pro Glu Asn Arg Asn Arg Asn Arg Tyr Arg Asp Val Ser  
   65                  70                  75                  80  
 Pro Tyr Asp His Ser Arg Val Lys Leu Gln Asn Ala Glu Asn Asp Tyr  
           85                  90                  95  
 Ile Asn Ala Ser Leu Val Asp Ile Glu Glu Ala Gln Arg Ser Tyr Ile  
       100                  105                  110  
 Leu Thr Gln Gly Pro Leu Pro Asn Thr Cys Cys His Phe Trp Leu Met  
   115                  120                  125  
 Val Trp Gln Gln Lys Thr Lys Ala Val Val Met Leu Asn Arg Ile Val  
   130                  135                  140  
 Glu Lys Glu Ser Ser Gly Glu Thr Glu Gln Tyr Leu Thr Phe Ile Ile

145                                      150                                      155                                      160  
Leu Pro Gly Gln Asn Leu Glu Ser Leu Glu Ser Thr Ser Phe Xaa Ser  
   165                                      170                                      175  
Gln Phe Leu Gly  
   180

<210> 1241  
<211> 19  
<212> PRT  
<213> Homo sapiens

<400> 1241  
Ser Arg Asp Gly Val Ser Pro His Trp Pro Gly Trp Ser Gln Thr Pro  
1                                      5                                      10                                      15

Asp Leu Lys

<210> 1242  
<211> 133  
<212> PRT  
<213> Homo sapiens

<400> 1242  
Ala Phe Asp Leu Cys Tyr Leu Tyr Ser Trp Asp Leu Ile Arg Lys Met  
1                                      5                                      10                                      15

Cys Phe Val Val Leu Asp Lys Leu Phe His Pro Leu Phe Pro Pro Gln  
   20                                      25                                      30

Asn Thr His Thr Glu Gln Thr Pro Phe His Lys Ser Pro His Ile His  
   35                                      40                                      45

Trp Gln Ser Pro Phe Ala Ser Trp Ser Pro Cys Val Pro Pro Lys Ser  
   50                                      55                                      60

Ile Met Phe Glu Ser Leu Trp Trp Met Leu Trp Gly Lys Val Met Ile  
65                                      70                                      75                                      80

Tyr Thr Glu Ala Thr Ala Lys Ser Val Val Gln Pro Leu Ser Pro Val  
   85                                      90                                      95

Lys Tyr Cys Ile Thr Pro Phe Gly Thr Thr Glu Lys Thr Val Ala Phe  
   100                                      105                                      110



Leu Gln Tyr Ser Ser Leu Leu His His Phe Cys Ile Asn Val Glu Thr  
115 120 125

Lys His Gln Asn Leu  
130

<210> 1243  
<211> 70  
<212> PRT  
<213> Homo sapiens

<400> 1243  
Pro Ala Arg Cys Met Pro Gly Pro Trp Pro Pro Tyr Leu Ala Ala Ser  
1 5 10 15

Cys Asp Ser Glu Ile His Pro Ser Arg Trp Gln Leu Leu Gly Leu Asn  
20 25 30

Leu Leu Glu Lys Lys Val Pro Ser Gln Glu Asn Ser Phe Tyr Ser Gly  
35 40 45

Arg Asn Ala Ser Glu Thr Pro Gln Gly Ser Leu Asn Thr Gln Leu Gln  
50 55 60

Gly Arg Ala Cys Gly Gly  
65 70

<210> 1244  
<211> 51  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (37)  
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1244  
Val Tyr Thr Leu Pro Ser His Lys Pro Ile Phe Lys Arg Ser Asn Ala  
1 5 10 15

Met Thr Ala Ile Leu Gln Glu Lys Lys Lys Leu Tyr Ser Cys Gly Asp  
20 25 30

Val Pro His Thr Xaa His Gln Leu Gln Gly Val Cys Pro Leu Gln Thr  
35 40 45

Pro Glu Pro  
50

<210> 1245  
<211> 111  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (48)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (97)  
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1245  
Asn Ala Val Phe Ser Ile Thr Asp Leu Ser Leu Pro Asn Tyr Leu Met  
1 5 10 15

Ala Ser Ser Val Gly Leu Leu Pro Thr Gln Leu Leu Asn Ser Tyr Leu  
20 25 30

Gly Thr Thr Leu Arg Thr Met Glu Asp Val Ile Ala Glu Gln Ser Xaa  
35 40 45

Ser Gly Tyr Phe Val Phe Cys Leu Gln Ile Ile Ile Ser Ile Gly Leu  
50 55 60

Met Phe Tyr Val Val His Arg Ala Gln Val Glu Leu Asn Ala Ala Ile  
65 70 75 80

Val Ala Cys Glu Met Gly Thr Gly Asn Leu Leu Trp Leu Lys Gly Asn  
85 90 95

Xaa Pro Asn Thr Ser Gly Leu Phe His Ser Thr Thr Arg Gly Pro  
100 105 110

<210> 1246  
<211> 223  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE

<222> (184)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (195)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (198)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (216)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1246

Lys Gln Ala Gly Cys Ser Ala Ala Pro Gly Ala Val Pro Pro Pro Glu  
1 5 10 15

Ala Asp Ser Thr Ser Ala Gly Met Ser Arg Arg Pro Cys Ser Cys Ala  
20 25 30

Leu Arg Pro Pro Arg Cys Ser Cys Ser Ala Ser Pro Ser Ala Val Thr  
35 40 45

Ala Ala Gly Arg Pro Arg Pro Ser Asp Ser Cys Lys Glu Glu Ser Ser  
50 55 60

Thr Leu Ser Val Lys Met Lys Cys Asp Phe Asn Cys Asn His Val His  
65 70 75 80

Ser Gly Leu Lys Leu Val Lys Pro Asp Asp Ile Gly Arg Leu Val Ser  
85 90 95

Tyr Thr Pro Ala Tyr Leu Glu Gly Ser Cys Lys Asp Cys Ile Lys Asp  
100 105 110

Tyr Glu Arg Leu Ser Cys Ile Gly Ser Pro Ile Val Ser Pro Arg Ile  
115 120 125

Val Glu Leu Glu Thr Glu Ser Lys Arg Leu His Asn Lys Glu Asn Gln  
130 135 140

His Val Gln Gln Thr Leu Asn Ser Thr Asn Glu Ile Glu Ala Leu Glu  
145 150 155 160

Thr Ser Arg Leu Tyr Glu Asp Ser Ala Ile Pro Gln Phe Leu Tyr Lys  
165 170 175

Val Ala Ser Val Thr Met Lys Xaa Val Ala Phe Trp Arg Arg Asn Ser  
180 185 190

Val Thr Xaa Tyr Asn Xaa Gly Trp Leu Gln Ile Gln Gly Pro Asp Pro  
195 200 205

Ile Phe Pro Thr Lys Asn Phe Xaa Leu Ala Arg Ser Phe Asn Phe  
210 215 220

<210> 1247

<211> 54

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (7)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1247

Leu Glu Lys Lys Asp Ile Xaa Asn Met Leu Met Trp Arg Ser Pro Ser  
1 5 10 15

Tyr Pro Lys Gly Glu Lys Gln Gly Lys Asp Pro Leu His Ser Lys Phe  
20 25 30

Pro Leu Gly Ser Pro Arg Ala His Cys Pro Gln Met His Ile Ile Ser  
35 40 45

Ala Glu Ile Gln Lys Pro  
50

<210> 1248

<211> 77

<212> PRT

<213> Homo sapiens

<400> 1248

Arg Phe Leu Ser Phe Val Phe Gly Leu Asn Phe Ser Pro Arg Ser Leu  
1 5 10 15

Phe Val Ser Ser Phe Cys Phe Ser Thr Val Leu Val Ile Thr Leu Cys  
20 25 30

Trp Arg Glu Pro Val Ser Leu Trp Pro Pro Leu Pro Lys Leu Lys Gln  
35 40 45

Gly Pro Ile Ile Met Ser Val Ser Arg Thr Val Pro Trp Ser Ser His  
50 55 60

Ile Pro Gly Pro Arg Leu Gly Pro Pro Ser Cys Val Leu  
65 70 75

<210> 1249

<211> 100

<212> PRT

<213> Homo sapiens

<400> 1249

Asn Asn Ile Cys Ser Gln Met Val Phe Leu Ala Val Ser Pro Val Val  
1 5 10 15

Ala Met Phe Arg Val Val Val Leu Ile Tyr Leu Gly Val His Lys Thr  
20 25 30

Tyr Leu Ala Gly Leu Phe Lys Lys Phe Arg Phe Leu Ala Leu Tyr Pro  
35 40 45

Gly Ile Ala Ser Gly Gly Met Gly Cys Gly Pro Gly Val Ile Thr Phe  
50 55 60

Ile Asn Ser Gly Ser Glu Thr Thr Glu Arg Asp Cys Phe Ile Glu Trp  
65 70 75 80

Glu Val Pro Arg Arg Lys Tyr Asn Ser Val Leu Ser Gly Gly Lys Trp  
85 90 95

Thr Leu Cys Thr  
100

<210> 1250

<211> 47

<212> PRT

<213> Homo sapiens

<400> 1250

Ser Asn Leu Met Leu Thr Asn Leu Leu Cys Leu Leu Cys Cys Phe Leu  
1 5 10 15

Val Pro Ala Ser Ala Ala Leu Gln Met Gln Thr Ile Leu Ser Tyr Leu  
20 25 30

Ala Gly Leu Leu Phe Tyr Phe Val Gly Trp Met Leu Pro Ser Ser

35

40

45

<210> 1251  
 <211> 193  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (7)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (68)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 1251  
 Lys Pro Gly Ser Thr Gly Xaa Val Arg Glu Gly Gln Pro Phe Glu Tyr  
   1                  5                  10                  15  
 Phe Val Tyr Gly Ala Ala Cys Ser Glu Val Glu Ile Asp Cys Leu Thr  
                   20                  25                  30  
 Gly Asp His Lys Asn Ile Arg Thr Asp Ile Val Met Asp Val Gly Cys  
           35                  40                  45  
 Ser Ile Asn Pro Ala Ile Asp Ile Gly Gln Ile Glu Gly Ala Phe Ile  
   50                  55                  60  
 Gln Gly Met Xaa Leu Tyr Thr Ile Glu Glu Leu Asn Tyr Ser Pro Gln  
   65                  70                  75                  80  
 Gly Ile Leu His Thr Arg Gly Pro Asp Gln Tyr Lys Ile Pro Ala Ile  
                   85                  90                  95  
 Cys Asp Met Pro Thr Glu Leu His Ile Ala Leu Leu Pro Pro Ser Gln  
           100                  105                  110  
 Asn Ser Asn Thr Leu Tyr Ser Ser Lys Gly Leu Gly Glu Ser Gly Val  
   115                  120                  125  
 Phe Leu Gly Cys Ser Val Phe Phe Ala Ile His Asp Ala Val Ser Ala  
   130                  135                  140  
 Ala Arg Gln Glu Arg Gly Leu His Gly Pro Leu Thr Leu Asn Ser Pro  
   145                  150                  155                  160  
 Leu Thr Pro Glu Lys Ile Arg Met Ala Cys Glu Asp Lys Phe Thr Lys

165

170

175

Met Ile Pro Arg Asp Glu Pro Gly Ser Tyr Val Pro Trp Asn Val Pro  
180 185 190

Ile

&lt;210&gt; 1252

&lt;211&gt; 51

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1252

Gly Ser Ser Lys Gly Ile Phe Leu Leu Phe Ser Leu Phe Leu Gly Cys  
1 5 10 15

Ser Lys Phe Ser Arg Ser Ser Ser Arg Ile Arg Lys Arg Ser Ile Val  
20 25 30

Arg Asn Arg Phe Trp Val Leu Leu Lys Phe Ala Cys Gln His Cys Ile  
35 40 45

Thr Phe Pro  
50

&lt;210&gt; 1253

&lt;211&gt; 696

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (5)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (541)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1253

His Glu Arg Glu Xaa His Gly Leu Gly Ala Asp Cys Arg Ala Gly Arg  
1 5 10 15

Leu Val Val Met Pro Gly Phe Leu Val Arg Ile Leu Leu Leu Leu  
20 25 30

Val Leu Leu Leu Leu Gly Pro Thr Arg Gly Leu Arg Asn Ala Thr Gln  
35 40 45

Arg Met Phe Glu Ile Asp Tyr Ser Arg Asp Ser Phe Leu Lys Asp Gly  
50 55 60

Gln Pro Phe Arg Tyr Ile Ser Gly Ser Ile His Tyr Ser Arg Val Pro  
65 70 75 80

Arg Phe Tyr Trp Lys Asp Arg Leu Leu Lys Met Lys Met Ala Gly Leu  
85 90 95

Asn Ala Ile Gln Thr Tyr Val Pro Trp Asn Phe His Glu Pro Trp Pro  
100 105 110

Gly Gln Tyr Gln Phe Ser Glu Asp His Asp Val Glu Tyr Phe Leu Arg  
115 120 125

Leu Ala His Glu Leu Gly Leu Leu Val Ile Leu Arg Pro Gly Pro Tyr  
130 135 140

Ile Cys Ala Glu Trp Glu Met Gly Gly Leu Pro Ala Trp Leu Leu Glu  
145 150 155 160

Lys Glu Ser Ile Leu Leu Arg Ser Ser Asp Pro Asp Tyr Leu Ala Ala  
165 170 175

Val Asp Lys Trp Leu Gly Val Leu Leu Pro Lys Met Lys Pro Leu Leu  
180 185 190

Tyr Gln Asn Gly Gly Pro Val Ile Thr Val Gln Val Glu Asn Glu Tyr  
195 200 205

Gly Ser Tyr Phe Ala Cys Asp Phe Asp Tyr Leu Arg Phe Leu Gln Lys  
210 215 220

Arg Phe Arg His His Leu Gly Asp Asp Val Val Leu Phe Thr Thr Asp  
225 230 235 240

Gly Ala His Lys Thr Phe Leu Lys Cys Gly Ala Leu Gln Gly Leu Tyr  
245 250 255

Thr Thr Val Asp Phe Gly Thr Gly Ser Asn Ile Thr Asp Ala Phe Leu  
260 265 270

Ser Gln Arg Lys Cys Glu Pro Lys Gly Pro Leu Ile Asn Ser Glu Phe  
275 280 285

Tyr Thr Gly Trp Leu Asp His Trp Gly Gln Pro His Ser Thr Ile Lys  
290 295 300



Thr Glu Ala Val Ala Ser Ser Leu Tyr Asp Ile Leu Ala Arg Gly Ala  
305 310 315 320

Ser Val Asn Leu Tyr Met Phe Ile Gly Gly Thr Asn Phe Ala Tyr Trp  
325 330 335

Asn Gly Ala Asn Ser Pro Tyr Ala Ala Gln Pro Thr Ser Tyr Asp Tyr  
340 345 350

Asp Ala Pro Leu Ser Glu Ala Gly Asp Leu Thr Glu Lys Tyr Phe Ala  
355 360 365

Leu Arg Asn Ile Ile Gln Lys Phe Glu Lys Val Pro Glu Gly Pro Ile  
370 375 380

Pro Pro Ser Thr Pro Lys Phe Ala Tyr Gly Lys Val Thr Leu Glu Lys  
385 390 395 400

Leu Lys Thr Val Gly Ala Ala Leu Asp Ile Leu Cys Pro Ser Gly Pro  
405 410 415

Ile Lys Ser Leu Tyr Pro Leu Thr Phe Ile Gln Val Lys Gln His Tyr  
420 425 430

Gly Phe Val Leu Tyr Arg Thr Thr Leu Pro Gln Asp Cys Ser Asn Pro  
435 440 445

Ala Pro Leu Ser Ser Pro Leu Asn Gly Val His Asp Arg Ala Tyr Val  
450 455 460

Ala Val Asp Gly Ile Pro Gln Gly Val Leu Glu Arg Asn Asn Val Ile  
465 470 475 480

Thr Leu Asn Ile Thr Gly Lys Ala Gly Ala Thr Leu Asp Leu Leu Val  
485 490 495

Glu Asn Met Gly Arg Val Asn Tyr Gly Ala Tyr Ile Asn Asp Phe Lys  
500 505 510

Gly Leu Val Ser Asn Leu Thr Leu Ser Ser Asn Ile Leu Thr Asp Trp  
515 520 525

Thr Ile Phe Pro Leu Asp Thr Glu Asp Ala Val Arg Xaa His Leu Gly  
530 535 540

Gly Trp Gly His Arg Asp Ser Gly His His Asp Glu Ala Trp Ala His  
545 550 555 560

Asn Ser Ser Asn Tyr Thr Leu Pro Ala Phe Tyr Met Gly Asn Phe Ser  
565 570 575

Ile Pro Ser Gly Ile Pro Asp Leu Pro Gln Asp Thr Phe Ile Gln Phe  
 580 585 590

Pro Gly Trp Thr Lys Gly Gln Val Trp Ile Asn Gly Phe Asn Leu Gly  
 595 600 605

Arg Tyr Trp Pro Ala Arg Gly Pro Gln Leu Thr Leu Phe Val Pro Gln  
 610 615 620

His Ile Leu Met Thr Ser Ala Pro Asn Thr Ile Thr Val Leu Glu Leu  
 625 630 635 640

Glu Trp Ala Pro Cys Ser Ser Asp Asp Pro Glu Leu Cys Ala Val Thr  
 645 650 655

Phe Val Asp Arg Pro Val Ile Gly Ser Ser Val Thr Tyr Asp His Pro  
 660 665 670

Ser Lys Pro Val Glu Lys Arg Leu Met Pro Pro Pro Pro Gln Lys Asn  
 675 680 685

Lys Asp Ser Trp Leu Asp His Val  
 690 695

<210> 1254

<211> 400

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (241)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (372)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1254

Thr Ser Ser Pro Ser Leu Ala Ser Asp Leu Leu Leu Asn Met Gly Ala  
 1 5 10 15

Phe Leu Asp Lys Pro Lys Thr Glu Lys His Asn Ala His Gly Ala Gly  
 20 25 30

Asn Gly Leu Arg Tyr Gly Leu Ser Ser Met Gln Gly Trp Arg Val Glu  
 35 40 45

Met Glu Asp Ala His Thr Ala Val Val Gly Ile Pro His Gly Leu Glu  
50 55 60

Asp Trp Ser Phe Phe Ala Val Tyr Asp Gly His Ala Gly Ser Arg Val  
65 70 75 80

Ala Asn Tyr Cys Ser Thr His Leu Leu Glu His Ile Thr Thr Asn Glu  
85 90 95

Asp Phe Arg Ala Ala Gly Lys Ser Gly Ser Ala Leu Glu Leu Ser Val  
100 105 110

Glu Asn Val Lys Asn Gly Ile Arg Thr Gly Phe Leu Lys Ile Asp Glu  
115 120 125

Tyr Met Arg Asn Phe Ser Asp Leu Arg Asn Gly Met Asp Arg Ser Gly  
130 135 140

Ser Thr Ala Val Gly Val Met Ile Ser Pro Lys His Ile Tyr Phe Ile  
145 150 155 160

Asn Cys Gly Asp Ser Arg Ala Val Leu Tyr Arg Asn Gly Gln Val Cys  
165 170 175

Phe Ser Thr Gln Asp His Lys Pro Cys Asn Pro Arg Glu Lys Glu Arg  
180 185 190

Ile Gln Asn Ala Gly Gly Ser Val Met Ile Gln Arg Val Asn Gly Ser  
195 200 205

Leu Ala Val Ser Arg Ala Leu Gly Asp Tyr Asp Tyr Lys Cys Val Asp  
210 215 220

Gly Lys Gly Pro Thr Glu Gln Leu Val Ser Pro Glu Pro Glu Val Tyr  
225 230 235 240

Xaa Ile Leu Arg Ala Glu Glu Asp Glu Phe Ile Ile Leu Ala Cys Asp  
245 250 255

Gly Ile Trp Asp Val Met Ser Asn Glu Glu Leu Cys Glu Tyr Val Lys  
260 265 270

Ser Arg Leu Glu Val Ser Asp Asp Leu Glu Asn Val Cys Asn Trp Val  
275 280 285

Val Asp Thr Cys Leu His Lys Gly Ser Arg Asp Asn Met Ser Ile Val  
290 295 300

Leu Val Cys Phe Ser Asn Ala Pro Lys Val Ser Asp Glu Ala Val Lys  
305 310 315 320

Lys Asp Ser Glu Leu Asp Lys His Leu Glu Ser Arg Val Glu Glu Ile  
                   325                  330                  335  
 Met Glu Lys Ser Gly Glu Glu Gly Met Pro Asp Leu Ala His Val Met  
                   340                  345                  350  
 Arg Ile Leu Ser Ala Glu Asn Ile Pro Asn Leu Pro Pro Gly Gly Gly  
                   355                  360                  365  
 Leu Ala Gly Xaa Arg Asn Val Ile Glu Ala Val Tyr Ser Arg Leu Asn  
                   370                  375                  380  
 Pro His Arg Glu Ser Asp Gly Gly Ala Gly Asp Leu Glu Asp Pro Trp  
                   385                  390                  395                  400

<210> 1255  
 <211> 155  
 <212> PRT  
 <213> Homo sapiens

<400> 1255  
 Val Ala Arg Ser Ala Pro Pro Asp Gly Ala Val Cys Ala Gly Pro Gly  
   1                  5                  10                  15  
 Ser Arg Arg Thr Glu Met Ala Glu Gln Ser Asp Glu Ala Val Lys Tyr  
                   20                  25                  30  
 Tyr Thr Leu Glu Glu Ile Gln Lys His Asn His Ser Lys Ser Thr Trp  
                   35                  40                  45  
 Leu Ile Leu His His Lys Val Tyr Asp Leu Thr Lys Phe Leu Glu Glu  
                   50                  55                  60  
 His Pro Gly Gly Glu Glu Val Leu Arg Glu Gln Ala Gly Gly Asp Ala  
                   65                  70                  75                  80  
 Thr Glu Asn Phe Glu Asp Val Gly His Ser Thr Asp Ala Arg Glu Met  
                   85                  90                  95  
 Ser Lys Thr Phe Ile Ile Gly Glu Leu His Pro Asp Asp Arg Pro Lys  
                   100                  105                  110  
 Leu Asn Lys Pro Pro Glu Thr Leu Ile Thr Thr Ile Asp Ser Ser Ser  
                   115                  120                  125

Ser Trp Trp Thr Asn Trp Val Ile Pro Ala Ile Ser Ala Val Ala Val  
 130 135 140

Ala Leu Met Tyr Arg Leu Tyr Met Ala Glu Asp  
 145 150 155

<210> 1256

<211> 378

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (116)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (184)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1256

Gln Ala Phe Ala Lys Ser Tyr Leu Gly Asp Thr Ile Glu Gly Thr Pro  
 1 5 10 15

Ala Gly Thr Gly Pro Glu Phe Pro Gly Arg Pro Thr Arg Pro Arg Arg  
 20 25 30

Lys Pro Thr Ala Ala Trp Ser Ala Lys Lys Ser Phe Gln Val Ser Arg  
 35 40 45

Thr Gly Leu Phe Leu Ser Lys Ser Gly Ser Thr Leu Thr Met Trp Leu  
 50 55 60

Tyr Leu Ala Ala Phe Val Gly Leu Tyr Tyr Leu Leu His Trp Tyr Arg  
 65 70 75 80

Glu Arg Gln Val Val Ser His Leu Gln Asp Lys Tyr Val Phe Ile Thr  
 85 90 95

Gly Cys Asp Ser Gly Phe Gly Asn Leu Leu Ala Arg Gln Leu Asp Ala  
 100 105 110

Arg Gly Leu Xaa Val Leu Ala Ala Cys Leu Thr Glu Lys Gly Ala Glu  
 115 120 125

Gln Leu Arg Gly Gln Thr Ser Asp Arg Leu Glu Thr Val Thr Leu Asp  
 130 135 140

Val Thr Lys Met Glu Ser Ile Ala Ala Ala Thr Gln Trp Val Lys Glu  
 145 150 155 160  
 His Val Gly Asp Arg Gly Leu Trp Gly Leu Val Asn Asn Ala Gly Ile  
 165 170 175  
 Leu Thr Pro Ile Thr Leu Cys Xaa Trp Leu Asn Thr Glu Asp Ser Met  
 180 185 190  
 Asn Met Leu Lys Val Asn Leu Ile Gly Val Ile Gln Val Thr Leu Ser  
 195 200 205  
 Met Leu Pro Leu Val Arg Arg Ala Arg Gly Arg Ile Val Asn Val Ser  
 210 215 220  
 Ser Ile Leu Gly Arg Val Ala Phe Phe Val Gly Gly Tyr Cys Val Ser  
 225 230 235 240  
 Lys Tyr Gly Val Glu Ala Phe Ser Asp Ile Leu Arg Arg Glu Ile Gln  
 245 250 255  
 His Phe Gly Val Lys Ile Ser Ile Val Glu Pro Gly Tyr Phe Arg Thr  
 260 265 270  
 Gly Met Thr Asn Met Thr Gln Ser Leu Glu Arg Met Lys Gln Ser Trp  
 275 280 285  
 Lys Glu Ala Pro Lys His Ile Lys Glu Thr Tyr Gly Gln Gln Tyr Phe  
 290 295 300  
 Asp Ala Leu Tyr Asn Ile Met Lys Glu Gly Leu Leu Asn Cys Ser Thr  
 305 310 315 320  
 Asn Leu Asn Leu Val Thr Asp Cys Met Glu His Ala Leu Thr Ser Val  
 325 330 335  
 His Pro Arg Thr Arg Tyr Ser Ala Gly Trp Asp Ala Lys Phe Phe Phe  
 340 345 350  
 Ile Pro Leu Ser Tyr Leu Pro Thr Ser Leu Ala Asp Tyr Ile Leu Thr  
 355 360 365  
 Arg Ser Trp Pro Lys Pro Ala Gln Ala Val  
 370 375

&lt;210&gt; 1257

&lt;211&gt; 75

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (63)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1257

Lys Pro Gln Pro Leu Ala Tyr Ser Ser Phe Asn Thr Arg Asp Leu Trp  
1 5 10 15

Leu Ile Trp Gly Arg Lys Thr Leu Lys Val Ile Ser Leu Gly Gln Arg  
20 25 30

Pro Tyr Cys Thr Arg Gly Lys Lys Tyr Ile Leu His Leu Leu Leu Leu  
35 40 45

Gln Leu Cys Leu Lys Phe Ile Cys Leu Val Ile Leu Ser Thr Xaa Thr  
50 55 60

Asn Phe Leu Val Tyr Phe Lys His Leu Val Gly  
65 70 75

&lt;210&gt; 1258

&lt;211&gt; 261

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1258

Pro Ser Gly Ile Pro Gly Ser Thr His Ala Ser Glu Arg Lys Leu Pro  
1 5 10 15

Glu Glu His Ala Arg Phe Tyr Ser Ala Glu Ile Ser Leu Ala Leu Asn  
20 25 30

Tyr Leu His Glu Arg Gly Ile Ile Tyr Arg Asp Leu Lys Leu Asp Asn  
35 40 45

Val Leu Leu Asp Ser Glu Gly His Ile Lys Leu Thr Asp Tyr Gly Met  
50 55 60

Cys Lys Glu Gly Leu Arg Pro Gly Asp Thr Thr Ser Thr Phe Cys Gly  
65 70 75 80

Thr Pro Asn Tyr Ile Ala Pro Glu Ile Leu Arg Gly Glu Asp Tyr Gly  
85 90 95

Phe Ser Val Asp Trp Trp Ala Leu Gly Val Leu Met Phe Glu Met Met  
100 105 110

Ala	Gly	Arg	Ser	Pro	Phe	Asp	Ile	Val	Gly	Ser	Ser	Asp	Asn	Pro	Asp	
115						120						125				
Gln	Asn	Thr	Glu	Asp	Tyr	Leu	Phe	Gln	Val	Ile	Leu	Glu	Lys	Gln	Ile	
130						135						140				
Arg	Ile	Pro	Arg	Ser	Leu	Ser	Val	Lys	Ala	Ala	Ser	Val	Leu	Lys	Ser	
145						150						155				
Phe	Leu	Asn	Lys	Asp	Pro	Lys	Glu	Arg	Leu	Gly	Cys	His	Pro	Gln	Thr	
			165						170						175	
Gly	Phe	Ala	Asp	Ile	Gln	Gly	His	Pro	Phe	Phe	Arg	Asn	Val	Asp	Trp	
			180						185						190	
Asp	Met	Met	Glu	Gln	Lys	Gln	Val	Val	Pro	Pro	Phe	Lys	Pro	Asn	Ile	
195						200						205				
Ser	Gly	Glu	Phe	Gly	Leu	Asp	Asn	Phe	Asp	Ser	Gln	Phe	Thr	Asn	Glu	
210						215						220				
Pro	Val	Gln	Leu	Thr	Pro	Asp	Asp	Asp	Asp	Ile	Val	Arg	Lys	Ile	Asp	
225						230						235			240	
Gln	Ser	Glu	Phe	Glu	Gly	Phe	Glu	Tyr	Ile	Asn	Pro	Leu	Leu	Met	Ser	
			245						250						255	
Ala	Glu	Glu	Cys	Val												
260																



Glu Ser Glu Asn Arg Ala Leu Ile Asn Val Gln Met Leu Asn Asn Ser  
20 25 30

Gly Phe Ala Arg Gly Ile Ile Glu Glu Phe Gln Asn Asn Asn Asp Leu  
35 40 45

Glu Leu Gln Gln Lys Cys Ile Asn Val Leu Ser Thr Tyr Ala Met Ile  
50 55 60

Gln Gly Gln Ile Asp Ala Asn Lys Glu Ile Gly Gln Phe Phe Ile Gln  
65 70 75 80

Thr Leu Thr Gln Leu Asn Val Arg Pro Glu Ile Leu Ile Glu Met Thr  
85 90 95

Asn Ser Leu Phe Gln Phe Thr Gly Met Pro Leu Thr Ala Ile Met Glu  
100 105 110

Pro Xaa Leu  
115

<210> 1260

<211> 296

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (59)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (124)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (247)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (270)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (282)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1260

Arg Pro Thr Arg Pro Arg His Ala Trp Ala Glu Leu Arg Val Val Ala  
1 5 10 15

Met Ala Ala Ser Gly Ala Val Glu Pro Gly Pro Pro Gly Ala Ala Val  
20 25 30

Ala Pro Ser Pro Ala Pro Ala Pro Pro Ala Pro Asp His Leu Phe  
35 40 45

Arg Pro Ile Ser Ala Glu Asp Glu Glu Gln Xaa Pro Thr Glu Ile Glu  
50 55 60

Ser Leu Cys Met Asn Cys Tyr Cys Asn Gly Met Thr Arg Leu Leu Leu  
65 70 75 80

Thr Lys Ile Pro Phe Phe Arg Glu Ile Ile Val Ser Ser Phe Ser Cys  
85 90 95

Glu His Cys Gly Trp Asn Asn Thr Glu Ile Gln Ser Ala Gly Arg Ile  
100 105 110

Gln Asp Gln Gly Val Arg Tyr Thr Leu Ser Val Xaa Ala Leu Glu Asp  
115 120 125

Met Asn Arg Glu Val Val Lys Thr Asp Ser Ala Ala Thr Arg Ile Pro  
130 135 140

Glu Leu Asp Phe Glu Ile Pro Ala Phe Ser Gln Lys Gly Ala Leu Thr  
145 150 155 160

Thr Val Glu Gly Leu Ile Thr Arg Ala Ile Ser Gly Leu Glu Gln Asp  
165 170 175

Gln Pro Ala Arg Arg Ala Asn Lys Asp Ala Thr Ala Glu Arg Ile Asp  
180 185 190

Glu Phe Ile Val Lys Leu Lys Glu Leu Lys Gln Val Ala Ser Pro Phe  
195 200 205

Thr Leu Ile Ile Asp Asp Pro Ser Gly Asn Ser Phe Val Glu Asn Pro  
210 215 220

His Ala Pro Gln Lys Asp Asp Ala Leu Val Ile Thr His Tyr Asn Arg  
225 230 235 240

Thr Arg Gln Gln Glu Glu Xaa Leu Gly Leu Gln Glu Glu Ala Pro Ala  
245 250 255

Glu Lys Pro Glu Glu Glu Asp Leu Arg Asn Glu Val Leu Xaa Phe Ser  
260 265 270  
Thr Asn Cys Pro Glu Cys Asn Val Pro Xaa Gln Thr Asn Met Lys Leu  
275 280 285  
Met Val Val Leu Phe Ala Trp Lys  
290 295

<210> 1261  
<211> 53  
<212> PRT  
<213> Homo sapiens

<400> 1261  
Gly Gly Arg Gly Gly Arg Ile Thr Gly Ala Arg Glu Phe Lys Thr Ser  
1 5 10 15  
Leu Gly Asn Ile Val Lys Pro Ser Pro Gln Ile Ile Phe Lys Lys Leu  
20 25 30  
Ala Arg His Gly Gly Ala Ala Cys Ser Pro Ser Tyr Ser Gly Gly Leu  
35 40 45  
Gly Gly Arg Ile Ala  
50

<210> 1262  
<211> 200  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (4)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (6)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (7)  
<223> Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1262

Asp Ser His Xaa Thr Xaa Xaa Pro Val Asp Pro Arg Val Arg Glu Ala  
1 5 10 15

Gly Ile Pro Glu Phe Tyr Asp Tyr Asp Val Ala Leu Ile Lys Leu Lys  
20 25 30

Asn Lys Leu Lys Tyr Gly Gln Thr Ile Arg Pro Ile Cys Leu Pro Cys  
35 40 45

Thr Glu Gly Thr Thr Arg Ala Leu Arg Leu Pro Pro Thr Thr Thr Cys  
50 55 60

Gln Gln Gln Lys Glu Glu Leu Leu Pro Ala Gln Asp Ile Lys Ala Leu  
65 70 75 80

Phe Val Ser Glu Glu Glu Lys Lys Leu Thr Arg Lys Glu Val Tyr Ile  
85 90 95

Lys Asn Gly Asp Lys Lys Gly Ser Cys Glu Arg Asp Ala Gln Tyr Ala  
100 105 110

Pro Gly Tyr Asp Lys Val Lys Asp Ile Ser Glu Val Val Thr Pro Arg  
115 120 125

Phe Leu Cys Thr Gly Gly Val Ser Pro Tyr Ala Asp Pro Asn Thr Cys  
130 135 140

Arg Gly Asp Ser Gly Gly Pro Leu Ile Val His Lys Arg Ser Arg Phe  
145 150 155 160

Ile Gln Val Gly Val Ile Ser Trp Gly Val Val Asp Val Cys Lys Asn  
165 170 175

Gln Lys Arg Gln Lys Gln Val Pro Val Thr Pro Glu Thr Phe Thr Ser  
180 185 190

Thr Ser Phe Lys Cys Cys Pro Gly  
195 200

&lt;210&gt; 1263

&lt;211&gt; 110

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (44)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (81)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (82)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (90)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (94)  
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1263  
Cys Ala Arg Pro His Cys His Gly Pro Gln Ile Tyr Ser Ser Lys Gln  
1 5 10 15  
Ser Ser His Gly Thr Phe Pro Gln Gly Ala Val Ser Pro Val Glu Glu  
20 25 30  
Ser Asp Met Thr His His Thr Asp Arg Lys Ile Xaa Thr Asn Tyr Glu  
35 40 45  
Lys Asn Ala Glu Gly Arg Lys Asn Ile Gly Gly Pro Ala Ala Glu Ser  
50 55 60  
Arg Leu Thr Cys Arg Asp Leu Cys Trp Pro Gly Pro Val Leu Gly Ser  
65 70 75 80  
Xaa Xaa His Gly Ile Lys Ser Asn Lys Xaa Thr Val Cys Xaa His Leu  
85 90 95  
Thr Val Trp Glu Lys Glu Gln Ala Pro Phe Thr Gly Phe Tyr  
100 105 110

<210> 1264  
<211> 151  
<212> PRT  
<213> Homo sapiens

<400> 1264

Phe Trp Pro Cys Arg Ala Phe Gly Ile Pro Ile Arg Val Tyr Thr His  
1 5 10 15  
Glu Val Val Thr Leu Trp Tyr Arg Ser Pro Glu Val Leu Leu Gly Ser  
20 25 30  
Ala Arg Tyr Ser Thr Pro Val Asp Ile Trp Ser Ile Gly Thr Ile Phe  
35 40 45  
Ala Glu Leu Ala Thr Lys Lys Pro Leu Phe His Gly Asp Ser Glu Ile  
50 55 60  
Asp Gln Leu Phe Arg Ile Phe Arg Ala Leu Gly Thr Pro Asn Asn Glu  
65 70 75 80  
Val Trp Pro Glu Val Glu Ser Leu Gln Asp Tyr Lys Asn Thr Phe Pro  
85 90 95  
Lys Trp Lys Pro Gly Ser Leu Ala Ser His Val Lys Asn Leu Asp Glu  
100 105 110  
Asn Gly Leu Asp Leu Leu Ser Lys Met Leu Ile Tyr Asp Pro Ala Lys  
115 120 125  
Arg Ile Ser Gly Lys Met Ala Leu Asn His Pro Tyr Phe Asn Asp Leu  
130 135 140  
Asp Asn Gln Ile Lys Lys Met  
145 150

&lt;210&gt; 1265

&lt;211&gt; 73

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (22)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1265

Pro Glu Trp Trp Pro Asp Ser Arg Ser Pro Ser Ser Pro Arg Thr Pro  
1 5 10 15  
Arg Ser Ser Ser Ser Xaa Pro Tyr Ser Pro Thr His Phe Pro Pro Pro  
20 25 30  
Leu Leu Gln Ala Gly Ser Val Phe Leu Leu Val Pro Glu Ala Leu Cys  
35 40 45

Ser Ser Pro Pro Ser Glu Pro Pro Tyr Ala Gly Ser Cys Lys Ala Trp  
50 55 60

Leu Ser Ala Asp Gly Ser Ser Gln Asp  
65 70

<210> 1266

<211> 319

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (305)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1266

Trp Gln Ser Ile Leu Pro Phe Ile Gln His Lys Arg Ser Trp Arg Gln  
1 5 10 15

Ser Arg Thr Trp Cys Ser His Thr Glu Arg Ala Leu Lys Ala Val Ser  
20 25 30

Asp Trp Ile Asp Glu Gln Glu Lys Gly Ser Ser Glu Gln Ala Glu Ser  
35 40 45

Asp Asn Met Asp Val Pro Pro Glu Asp Asp Ser Lys Glu Gly Ala Gly  
50 55 60

Glu Gln Lys Thr Glu His Met Thr Arg Thr Leu Arg Gly Val Met Arg  
65 70 75 80

Val Gly Leu Val Ala Lys Gly Leu Leu Leu Lys Gly Asp Leu Asp Leu  
85 90 95

Glu Leu Val Leu Leu Cys Lys Glu Lys Pro Thr Thr Ala Leu Leu Asp  
100 105 110

Lys Val Ala Asp Asn Leu Ala Ile Gln Leu Ala Ala Val Thr Glu Asp  
115 120 125

Lys Tyr Glu Ile Leu Gln Ser Val Asp Asp Ala Ala Ile Val Ile Lys  
130 135 140

Asn Thr Lys Glu Pro Pro Leu Ser Leu Thr Ile His Leu Thr Ser Pro  
145 150 155 160

Val Val Arg Glu Glu Met Glu Lys Val Leu Ala Gly Glu Thr Leu Ser

165                      170                      175  
 Val Asn Asp Pro Pro Asp Val Leu Asp Arg Gln Lys Cys Leu Ala Ala  
                          180                      185                      190  
 Leu Ala Ser Leu Arg His Ala Lys Trp Phe Gln Ala Arg Ala Asn Gly  
                          195                      200                      205  
 Leu Lys Ser Cys Val Ile Val Ile Arg Val Leu Arg Asp Leu Cys Thr  
                          210                      215                      220  
 Arg Val Pro Thr Trp Gly Pro Leu Arg Gly Trp Pro Leu Glu Leu Leu  
                          225                      230                      235                      240  
 Cys Glu Lys Ser Ile Gly Thr Ala Asn Arg Pro Met Gly Ala Gly Glu  
                          245                      250                      255  
 Ala Leu Arg Arg Val Leu Glu Cys Leu Ala Ser Gly Ile Val Met Pro  
                          260                      265                      270  
 Asp Gly Ser Gly Ile Tyr Asp Pro Cys Glu Lys Glu Ala Thr Asp Ala  
                          275                      280                      285  
 Ile Gly His Leu Asp Arg Gln Gln Arg Glu Asp Ile Thr Gln Ser Ala  
                          290                      295                      300  
 Xaa Pro His Cys Gly Ser Leu Pro Ser Ala Ser Ser Ile Lys Ser  
                          305                      310                      315

&lt;210&gt; 1267

&lt;211&gt; 119

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1267

Phe Gly Arg Val Arg Pro Gln Arg Gln Ala Val Thr Leu Leu Leu Leu  
                          1                      5                      10                      15  
 Pro Leu Ala Met Ser Thr Ser Thr Ser Cys Pro Ile Pro Gly Gly Arg  
                          20                      25                      30  
 Asp Gln Leu Pro Asp Cys Tyr Ser Thr Thr Pro Gly Gly Thr Leu Tyr  
                          35                      40                      45  
 Ala Thr Thr Pro Gly Gly Thr Arg Ile Ile Tyr Asp Arg Lys Phe Leu  
                          50                      55                      60  
 Leu Glu Cys Lys Asn Ser Pro Ile Ala Arg Thr Pro Pro Cys Cys Leu  
                          65                      70                      75                      80



Pro Gln Ile Pro Gly Val Thr Thr Pro Pro Thr Ala Pro Leu Ser Lys  
85 90 95

Leu Glu Glu Leu Lys Glu Gln Glu Thr Glu Glu Glu Ile Pro Asp Asp  
100 105 110

Ala Gln Phe Glu Met Asp Ile  
115

<210> 1268

<211> 329

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (3)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (59)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (307)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (308)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (314)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (317)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (323)

<223> Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (327)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (328)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (329)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1268

Arg Cys Xaa Gly Ser Ala Arg Ile Glu Val Cys Ser Ala Phe Gly Ser  
1 5 10 15

Met Ser Ala Ala Val Thr Ala Gly Lys Leu Ala Arg Ala Pro Ala Asp  
20 25 30

Pro Gly Lys Ala Gly Val Pro Gly Val Ala Ala Pro Gly Ala Pro Ala  
35 40 45

Ala Ala Pro Pro Ala Lys Glu Ile Pro Glu Xaa Leu Val Asp Pro Arg  
50 55 60

Ser Arg Arg Arg Tyr Val Arg Gly Arg Phe Leu Gly Lys Gly Gly Phe  
65 70 75 80

Ala Lys Cys Phe Glu Ile Ser Asp Ala Asp Thr Lys Glu Val Phe Ala  
85 90 95

Gly Lys Ile Val Pro Lys Ser Leu Leu Leu Lys Pro His Gln Arg Glu  
100 105 110

Lys Met Ser Met Glu Ile Ser Ile His Arg Ser Leu Ala His Gln His  
115 120 125

Val Val Gly Phe His Gly Phe Phe Glu Asp Asn Asp Phe Val Phe Val  
130 135 140

Val Leu Glu Leu Cys Arg Arg Arg Ser Leu Leu Glu Leu His Lys Arg  
145 150 155 160

Arg Lys Ala Leu Thr Glu Pro Glu Ala Arg Tyr Tyr Leu Arg Gln Ile  
165 170 175

Val Leu Gly Cys Gln Tyr Leu His Arg Asn Arg Val Ile His Arg Asp

180                      185                      190  
 Leu Lys Leu Gly Asn Leu Phe Leu Asn Glu Asp Leu Glu Val Lys Ile  
       195                      200                      205  
 Gly Asp Phe Gly Leu Ala Thr Lys Val Glu Tyr Asp Gly Glu Arg Lys  
       210                      215                      220  
 Lys Thr Leu Cys Gly Thr Pro Asn Tyr Ile Ala Pro Glu Val Leu Ser  
 225                      230                      235                      240  
 Lys Lys Gly His Ser Phe Glu Val Asp Val Trp Ser Ile Gly Cys Ile  
                     245                      250                      255  
 Met Tyr Thr Leu Leu Val Gly Lys Pro Pro Phe Glu Thr Ser Cys Leu  
                     260                      265                      270  
 Lys Glu Thr Tyr Leu Arg Ile Lys Lys Asn Glu Tyr Ser Ile Pro Lys  
                     275                      280                      285  
 His Ile Asn Pro Val Ala Ala Ser Leu Ile Gln Lys Met Leu Gln Thr  
                     290                      295                      300  
 Asp Pro Xaa Xaa Arg Gln Pro Leu Thr Xaa Cys Leu Xaa Thr Ser Asp  
 305                      310                      315                      320  
 Leu Ser Xaa Gln Lys Lys Xaa Xaa Xaa  
                     325

<210> 1269  
 <211> 144  
 <212> PRT  
 <213> Homo sapiens

<400> 1269  
 Leu Gln Thr Asn Ser Phe Pro Val Leu Leu Thr Gln Gly Leu Glu Ser  
   1                    5                    10                    15  
 Asn Asp Phe Glu Met Leu Asn Lys Val Leu Gln Thr Arg Asn Val Asn  
                     20                    25                    30  
 Leu Ile Lys Lys Thr Val Leu Arg Met Pro Leu His Thr Ile Ile Pro  
                     35                    40                    45  
 Leu Leu Gln Glu Leu Thr Lys Arg Leu Gln Gly His Pro Asn Ser Ala  
                     50                    55                    60  
 Val Leu Met Val Gln Trp Leu Lys Cys Val Leu Thr Val His Ala Ser  
   65                    70                    75                    80

Tyr Leu Ser Thr Leu Pro Asp Leu Val Pro Gln Leu Gly Thr Leu Tyr  
85 90 95

Gln Leu Met Glu Ser Arg Val Lys Thr Phe Gln Lys Leu Ser His Leu  
100 105 110

His Gly Lys Leu Ile Leu Leu Ile Thr Gln Val Thr Ala Ser Glu Lys  
115 120 125

Thr Lys Gly Ala Thr Ser Pro Gly Gln Lys Ala Lys Leu Val Tyr Glu  
130 135 140

<210> 1270

<211> 84

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (38)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1270

Asn Ser Ala Arg Ala Thr Leu Asp Glu Ala Thr Pro Thr Leu Thr Asn  
1 5 10 15

Gln Ser Pro Thr Leu Thr Leu Gln Ser Thr Asn Thr His Thr Gln Ser  
20 25 30

Ser Ser Ser Ser Ser Xaa Gly Gly Leu Phe Arg Ser Arg Pro Ala His  
35 40 45

Ser Leu Pro Pro Gly Glu Asp Gly Arg Val Glu Pro Tyr Val Asp Phe  
50 55 60

Ala Glu Phe Tyr Arg Leu Trp Ser Val Asp His Gly Glu Gln Ser Val  
65 70 75 80

Val Thr Ala Pro

<210> 1271

<211> 123

<212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (28)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (29)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (58)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (74)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (82)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 1271

Leu Gln Ala Ala Gly Gly His Leu Thr Ala Ala Pro Gly Ala Val His  
 1 5 10 15

Gly Ala Ala Ala Val Arg Phe Gln Ala Ala Ala Xaa Xaa Gln Glu Gly  
 20 25 30

Val Glu Ala Ala Pro Arg Pro Val Ser Pro Gln Ala Ser Leu Glu Glu  
 35 40 45

Arg Ala Val Ser Arg Asn Pro Leu Cys Xaa Leu Cys Leu Glu Glu Arg  
 50 55 60

Arg His Pro Thr Ala Thr Pro Cys Gly Xaa Leu Phe Cys Trp Glu Cys  
 65 70 75 80

Ile Xaa Ala Trp Cys Ser Ser Lys Ala Glu Cys Pro Leu Leu Pro Gly  
 85 90 95

Glu Ser Ser Leu Pro Arg Lys Leu Ile Tyr Leu Arg His Tyr Arg Leu  
 100 105 110

Asn Arg Arg Pro Gly Trp Ala Leu Asp Thr Asn

115

120

&lt;210&gt; 1272

&lt;211&gt; 86

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1272

Gly Thr Glu Lys Arg Glu Lys Arg Leu Gly Ser His His Gly Glu Ala  
1 5 10 15

Gly Val Ser Gln Leu Thr Ser Ala Gly Asp Ser Gly Val Leu Val Leu  
20 25 30

Pro Leu Ser Leu Pro Pro Arg Ser Ser Leu Ala Gly Leu Ala Glu Ala  
35 40 45

Leu Leu Met Asn Leu Thr Glu Gly Pro Leu Ala Met Ala Glu Met Asp  
50 55 60

Pro Thr Gln Gly Arg Val Val Phe Glu Asp Val Ala Ile Tyr Phe Ser  
65 70 75 80

Arg Arg Ser Gly Gly Thr  
85

&lt;210&gt; 1273

&lt;211&gt; 72

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (60)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (69)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (72)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1273

Ile Glu Pro Leu Leu Arg Leu Leu Arg Ile Asn His Leu Leu Asn Arg  
1 5 10 15

Ser Ala Tyr Gln Glu Gly Arg Glu Gly Ser Gln Lys Glu Met Leu Ala  
20 25 30

Pro Gly Pro Arg Ser Gln Gly Leu Leu Thr Pro Gly Val Asp Phe Phe  
35 40 45

Ser Glu Val Ala Pro Tyr Lys Gly Asn Met Ala Xaa Ala Gly Thr Ser  
50 55 60

Thr Gly Arg Leu Xaa Ser Gly Xaa  
65 70

<210> 1274

<211> 56

<212> PRT

<213> Homo sapiens

<400> 1274

His Leu Thr Tyr Ser Trp His Leu Val Gly Thr Glu Ser Met Asn Arg  
1 5 10 15

Ser Tyr Trp Leu Pro Ile Gln Arg Leu Val Gly Val Val Ile Pro Ile  
20 25 30

Ala Glu Ser Gln Leu Val Asn Gln Gln Gly Phe His Leu Cys Cys Ser  
35 40 45

Pro Pro Pro Ser Pro Leu Glu Gly  
50 55

<210> 1275

<211> 161

<212> PRT

<213> Homo sapiens

<400> 1275

Leu Pro Gly Cys Arg Asn Ser Ala Gln Asn Cys Arg Leu Ile Phe Ser  
1 5 10 15

Lys Ala Lys Pro Ser Val Leu Ala Leu Cys Leu Leu Asn Leu Glu Val  
20 25 30

Glu Thr Leu Lys Ser Val Glu Leu Leu Glu Ile Leu Leu Leu Val Lys  
35 40 45

Lys His Ser Lys Ile Asn Asp Thr Glu Phe Phe Tyr Trp Arg Glu Leu  
50 55 60

Val Ser Lys Cys Leu Ala Glu Tyr Ser Ser Pro Glu Cys Cys Lys Pro  
65 70 75 80

Asp Leu Lys Lys Leu Val Trp Ile Val Ser Arg Arg Thr Ala Gln Asn  
85 90 95

Leu His Asn Ser Tyr Tyr Ser Val Pro Glu Leu Pro Thr Ile Pro Glu  
100 105 110

Gly Gly Cys Phe Asp Glu Ser Glu Ser Glu Asp Ser Cys Glu Asp Met  
115 120 125

Ser Cys Gly Glu Glu Ser Leu Ser Ser Ser Pro Pro Ser Asp Gln Glu  
130 135 140

Cys Thr Phe Phe Phe Asn Phe Lys Val Ala Gln Thr Leu Cys Phe Pro  
145 150 155 160

Ser

<210> 1276

<211> 49

<212> PRT

<213> Homo sapiens

<400> 1276

Asn Asn Lys Ser Leu Leu Lys Lys Tyr Ile Phe Phe Leu Leu Arg Ala  
1 5 10 15

Leu Leu Ala Ile Gly Asn Leu Lys Ile Ser Ser Pro Lys Gln Gly Pro  
20 25 30

Tyr Gln Ile Phe Leu Asp Pro Pro Met Leu Ser Val Leu Ala Thr His  
35 40 45

Cys

<210> 1277

<211> 89

<212> PRT

<213> Homo sapiens



&lt;400&gt; 1277

Leu Asn Leu Leu Met Ser Thr Ile Leu Phe Leu Gln Asp Leu Pro Gly  
1 5 10 15  
Leu Lys Arg Asn Tyr Phe Pro Gly Pro Asn Thr Leu Val Phe Tyr Gln  
20 25 30  
His Leu Ile Asp Leu Gly Lys Ala Glu Cys Leu Thr Pro Ala Cys Gly  
35 40 45  
Ile Leu Leu Trp Gln Ala Glu Gln Thr Asn Thr Asp Phe Asn Ile Gln  
50 55 60  
Thr Lys Ser Lys Gly Met Glu Lys Asp Thr Pro Ser Gln Asn Lys Glu  
65 70 75 80  
Ser Ser Tyr Val Asn Leu Arg Gln Ser  
85

&lt;210&gt; 1278

&lt;211&gt; 199

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1278

Pro Gln Pro Leu Pro Pro Pro Thr Ser Met Ala Arg His Val Phe Leu  
1 5 10 15  
Thr Gly Pro Pro Gly Val Gly Lys Thr Thr Leu Ile His Lys Ala Ser  
20 25 30  
Glu Val Leu Lys Ser Ser Gly Val Pro Val Asp Gly Phe Tyr Thr Glu  
35 40 45  
Glu Val Arg Gln Gly Gly Arg Arg Ile Gly Phe Asp Val Val Thr Leu  
50 55 60  
Ser Gly Thr Arg Gly Pro Leu Ser Arg Val Gly Leu Glu Pro Pro Pro  
65 70 75 80  
Gly Lys Arg Glu Cys Arg Val Gly Gln Tyr Val Val Asp Leu Thr Ser  
85 90 95  
Phe Glu Gln Leu Ala Leu Pro Val Leu Arg Asn Ala Asp Cys Ser Ser  
100 105 110  
Gly Pro Gly Gln Arg Val Cys Val Ile Asp Glu Ile Gly Lys Met Glu  
115 120 125

Leu Phe Ser Gln Leu Phe Ile Gln Ala Val Arg Gln Thr Leu Ser Thr  
 130 135 140

Pro Gly Thr Ile Ile Leu Gly Thr Ile Pro Val Pro Lys Gly Lys Pro  
 145 150 155 160

Leu Ala Leu Val Glu Glu Ile Arg Asn Arg Lys Asp Val Lys Val Phe  
 165 170 175

Asn Val Thr Lys Glu Asn Arg Asn His Leu Leu Pro Asp Ile Val Thr  
 180 185 190

Cys Val Gln Ser Ser Arg Lys  
 195

<210> 1279

<211> 183

<212> PRT

<213> Homo sapiens

<400> 1279

Phe Gly Thr Glu Gly Ala Met Ala Val Ala Asn Ser Ser Pro Val Asn  
 1 5 10 15

Pro Val Val Phe Phe Asp Val Ser Ile Gly Gly Gln Glu Val Gly Arg  
 20 25 30

Met Lys Ile Glu Leu Phe Ala Asp Val Val Pro Lys Thr Ala Glu Asn  
 35 40 45

Phe Arg Gln Phe Cys Thr Gly Glu Phe Arg Lys Asp Gly Val Pro Ile  
 50 55 60

Gly Tyr Lys Gly Ser Thr Phe His Arg Val Ile Lys Asp Phe Met Ile  
 65 70 75 80

Gln Gly Gly Asp Phe Val Asn Gly Asp Gly Thr Gly Val Ala Ser Ile  
 85 90 95

Tyr Arg Gly Pro Phe Ala Asp Glu Asn Phe Lys Leu Arg His Ser Ala  
 100 105 110

Pro Gly Leu Leu Ser Met Ala Asn Ser Gly Pro Ser Thr Asn Gly Cys  
 115 120 125

Gln Phe Phe Ile Thr Cys Ser Lys Cys Asp Trp Leu Asp Gly Lys His  
 130 135 140

Val Val Phe Gly Lys Ile Ile Asp Gly Leu Leu Val Met Arg Lys Ile  
145 150 155 160

Glu Asn Val Pro Thr Gly Pro Asn Asn Lys Pro Lys Leu Pro Val Val  
165 170 175

Ile Ser Gln Cys Gly Glu Met  
180

<210> 1280

<211> 62

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (17)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1280

Asn Phe Cys Trp Asn Ile Ile Asn Gly Ser Ile Pro Lys Asp Thr Trp  
1 5 10 15

Xaa Leu Leu Leu Asp Phe Ser Thr Met Ile Ala Asp Asp Met Ser Asn  
20 25 30

Tyr Asp Glu Glu Gly Ala Trp Pro Val Leu Ile Asp Asp Phe Val Glu  
35 40 45

Phe Ala Arg Pro Gln Ile Ala Gly Thr Lys Ser Thr Thr Val  
50 55 60

<210> 1281

<211> 38

<212> PRT

<213> Homo sapiens

<400> 1281

Cys Ser Phe Ile Ile Leu Ile Ile Leu Gly Pro Leu Glu Phe Ala Glu  
1 5 10 15

Ser Thr Leu Pro Val Leu Tyr Lys Trp Asn Asn Lys Ala Trp Met Thr  
20 25 30

Ala Cys Leu Phe Thr Ser  
35

1087

&lt;210&gt; 1282

&lt;211&gt; 515

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1282

Ser Ser Phe Phe Ser Phe Leu Ala Ala Ala Pro Gly Ser Ser Arg Arg  
 1 5 10 15

Ala Ala Pro Val Leu Arg Pro Glu Met Asn Pro Ala Ala Glu Ala Glu  
 20 25 30

Phe Asn Ile Leu Leu Ala Thr Asp Ser Tyr Lys Val Thr His Tyr Lys  
 35 40 45

Gln Tyr Pro Pro Asn Thr Ser Lys Val Tyr Ser Tyr Phe Glu Cys Arg  
 50 55 60

Glu Lys Lys Thr Glu Asn Ser Lys Leu Arg Lys Val Lys Tyr Glu Glu  
 65 70 75 80

Thr Val Phe Tyr Gly Leu Gln Tyr Ile Leu Asn Lys Tyr Leu Lys Gly  
 85 90 95

Lys Val Val Thr Lys Glu Lys Ile Gln Glu Ala Lys Asp Val Tyr Lys  
 100 105 110

Glu His Phe Gln Asp Asp Val Phe Asn Glu Lys Gly Trp Asn Tyr Ile  
 115 120 125

Leu Glu Lys Tyr Asp Gly His Leu Pro Ile Glu Ile Lys Ala Val Pro  
 130 135 140

Glu Gly Phe Val Ile Pro Arg Gly Asn Val Leu Phe Thr Val Glu Asn  
 145 150 155 160

Thr Asp Pro Glu Cys Tyr Trp Leu Thr Asn Trp Ile Glu Thr Ile Leu  
 165 170 175

Val Gln Ser Trp Tyr Pro Ile Thr Val Ala Thr Asn Ser Arg Glu Gln  
 180 185 190

Lys Lys Ile Leu Ala Lys Tyr Leu Leu Glu Thr Ser Gly Asn Leu Asp  
 195 200 205

Gly Leu Glu Tyr Lys Leu His Asp Phe Gly Tyr Arg Gly Val Ser Ser  
 210 215 220

Gln Glu Thr Ala Gly Ile Gly Ala Ser Ala His Leu Val Asn Phe Lys

225                                      230                                      235                                      240  
 Gly Thr Asp Thr Val Ala Gly Leu Ala Leu Ile Lys Lys Tyr Tyr Gly  
    245                                      250                                      255  
 Thr Lys Asp Pro Val Pro Gly Tyr Ser Val Pro Ala Ala Glu His Ser  
    260                                      265                                      270  
 Thr Ile Thr Ala Trp Gly Lys Asp His Glu Lys Asp Ala Phe Glu His  
    275                                      280                                      285  
 Ile Val Thr Gln Phe Ser Ser Val Pro Val Ser Val Val Ser Asp Ser  
    290                                      295                                      300  
 Tyr Asp Ile Tyr Asn Ala Cys Glu Lys Ile Trp Gly Glu Asp Leu Arg  
 305                                      310                                      315                                      320  
 His Leu Ile Val Ser Arg Ser Thr Gln Ala Pro Leu Ile Ile Arg Pro  
    325                                      330                                      335  
 Asp Ser Gly Asn Pro Leu Asp Thr Val Leu Lys Val Leu Glu Ile Leu  
    340                                      345                                      350  
 Gly Lys Lys Phe Pro Val Thr Glu Asn Ser Lys Gly Tyr Lys Leu Leu  
    355                                      360                                      365  
 Pro Pro Tyr Leu Arg Val Ile Gln Gly Asp Gly Val Asp Ile Asn Thr  
    370                                      375                                      380  
 Leu Gln Glu Ile Val Glu Gly Met Lys Gln Lys Met Trp Ser Ile Glu  
 385                                      390                                      395                                      400  
 Asn Ile Ala Phe Gly Ser Gly Gly Gly Leu Leu Gln Lys Leu Thr Arg  
    405                                      410                                      415  
 Asp Leu Leu Asn Cys Ser Phe Lys Cys Ser Tyr Val Val Thr Asn Gly  
    420                                      425                                      430  
 Leu Gly Ile Asn Val Phe Lys Asp Pro Val Ala Asp Pro Asn Lys Arg  
    435                                      440                                      445  
 Ser Lys Lys Gly Arg Leu Ser Leu His Arg Thr Pro Ala Gly Asn Phe  
    450                                      455                                      460  
 Val Thr Leu Glu Glu Gly Lys Gly Asp Leu Glu Glu Tyr Gly Gln Asp  
 465                                      470                                      475                                      480  
 Leu Leu His Thr Val Phe Lys Asn Gly Lys Val Thr Lys Ser Tyr Ser  
    485                                      490                                      495  
 Phe Asp Glu Ile Arg Lys Asn Ala Gln Leu Asn Ile Glu Leu Glu Ala

500

505

510

Ala His His  
515

<210> 1283  
<211> 88  
<212> PRT  
<213> Homo sapiens

<400> 1283  
Arg Arg Leu His Leu Phe Leu Leu Ser Leu Leu Gly Met Leu Thr Ala  
1 5 10 15  
Ser Gly Asn Ser Glu Leu Asn Ile Cys Phe Val Arg Lys Tyr Leu Phe  
20 25 30  
Phe Tyr Phe Glu Val Trp Gln Pro Ser Cys Tyr Pro Lys Ala Lys Pro  
35 40 45  
Leu Cys Gln Glu Ser Asn Lys Cys Leu Glu Ser Lys His Asp Val Ser  
50 55 60  
Ile Val Gln Pro Pro Phe Ser Trp Leu Phe Lys Gly Cys Thr Ser Cys  
65 70 75 80  
Ile Lys Gly Tyr Phe Met Leu Lys  
85

<210> 1284  
<211> 17  
<212> PRT  
<213> Homo sapiens

<400> 1284  
Phe Cys Ile Phe Ser Arg Asp Gly Val Ser Pro Cys Trp Ser Asp Trp  
1 5 10 15

Ser

<210> 1285  
<211> 515  
<212> PRT  
<213> Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (74)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (97)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (126)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (135)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1285

Gly	Cys	Ser	Leu	His	Leu	Trp	Ala	Ser	Leu	Ala	Arg	His	Ala	Gly	Gln
1				5					10					15	

Cys	Leu	Pro	Ala	Pro	Phe	Ala	Thr	Ser	Ser	Ala	Leu	Arg	Gly	Leu	Glu
			20					25					30		

Leu	Gly	Glu	Arg	Ala	Gly	Gly	Leu	Val	Gly	Trp	Pro	Gly	Leu	Arg	Pro
	35						40					45			

Ala	Ala	Thr	Thr	Ile	Leu	Trp	Pro	Gly	Arg	Cys	Glu	Trp	Ser	Ala	Gly
	50					55					60				

Gln	Ser	Ala	Arg	Cys	Leu	Ala	Pro	Gln	Xaa	Ile	Pro	Pro	Ser	Thr	Pro
65					70					75					80

Gly	Ser	Ser	Asp	Val	Gly	Gln	Leu	Cys	Ala	Gly	Ala	Cys	Asp	Pro	Arg
				85					90					95	

Xaa	Gly	Leu	Gly	Ala	Ala	Ser	Ile	Ala	Ala	Asp	Gly	Ala	Pro	Arg	Gly
		100						105					110		

Pro	Gly	Glu	Tyr	Gln	Pro	Gly	Lys	Gly	Ser	Ala	Arg	Pro	Xaa	Thr	Ala
	115					120						125			

Asp	Pro	Gly	Arg	Ala	Gly	Xaa	Thr	Glu	Val	Arg	Glu	Pro	Ala	Gly	Ser
	130					135						140			

Ser	Ala	Gln	Gln	Arg	Pro	Lys	Thr	Arg	Arg	Val	Ala	Pro	Leu	Lys	Asp
145					150					155					160

Leu Pro Val Asn Asp Glu His Val Thr Val Pro Pro Trp Lys Ala Asn  
 165 170 175

Ser Lys Gln Pro Ala Phe Thr Ile His Val Asp Glu Ala Glu Lys Glu  
 180 185 190

Ala Gln Lys Lys Pro Ala Glu Ser Gln Lys Ile Glu Arg Glu Asp Ala  
 195 200 205

Leu Ala Phe Asn Ser Ala Ile Ser Leu Pro Gly Pro Arg Lys Pro Leu  
 210 215 220

Val Pro Leu Asp Tyr Pro Met Asp Gly Ser Phe Glu Ser Pro His Thr  
 225 230 235 240

Met Asp Met Ser Ile Val Leu Glu Asp Glu Lys Pro Val Ser Val Asn  
 245 250 255

Glu Val Pro Asp Tyr His Glu Asp Ile His Thr Tyr Leu Arg Glu Met  
 260 265 270

Glu Val Lys Cys Lys Pro Lys Val Gly Tyr Met Lys Lys Gln Pro Asp  
 275 280 285

Ile Thr Asn Ser Met Arg Ala Ile Leu Val Asp Trp Leu Val Glu Val  
 290 295 300

Gly Glu Glu Tyr Lys Leu Gln Asn Glu Thr Leu His Leu Ala Val Asn  
 305 310 315 320

Tyr Ile Asp Arg Phe Leu Ser Ser Met Ser Val Leu Arg Gly Lys Leu  
 325 330 335

Gln Leu Val Gly Thr Ala Ala Met Leu Leu Ala Ser Lys Phe Glu Glu  
 340 345 350

Ile Tyr Pro Pro Glu Val Ala Glu Phe Val Tyr Ile Thr Asp Asp Thr  
 355 360 365

Tyr Thr Lys Lys Gln Val Leu Arg Met Glu His Leu Val Leu Lys Val  
 370 375 380

Leu Thr Phe Asp Leu Ala Ala Pro Thr Val Asn Gln Phe Leu Thr Gln  
 385 390 395 400

Tyr Phe Leu His Gln Gln Pro Ala Asn Cys Lys Val Glu Ser Leu Ala  
 405 410 415

Met Phe Leu Gly Glu Leu Ser Leu Ile Asp Ala Asp Pro Tyr Leu Lys  
 420 425 430



Tyr Leu Pro Ser Val Ile Ala Gly Ala Ala Phe His Leu Ala Leu Tyr  
435 440 445

Thr Val Thr Gly Gln Ser Trp Pro Glu Ser Leu Ile Arg Lys Thr Gly  
450 455 460

Tyr Thr Leu Glu Ser Leu Lys Pro Cys Leu Met Asp Leu His Gln Thr  
465 470 475 480

Tyr Leu Lys Ala Pro Gln His Ala Gln Gln Ser Ile Arg Glu Lys Tyr  
485 490 495

Lys Asn Ser Lys Tyr His Gly Val Ser Leu Leu Asn Pro Pro Glu Thr  
500 505 510

Leu Asn Leu  
515

<210> 1286  
<211> 108  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (85)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (96)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (102)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (107)  
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1286  
Arg Pro Ala Cys Pro Ser Gln Glu Arg Pro Pro Pro Ser Gln Gln Met  
1 5 10 15

Arg Gln Gly Cys Leu Ala Leu Pro Lys Ser Glu Ser Leu Pro Ser Gly

20 25 30  
Ile Cys Arg Ser Ala Gln Gly Ser Arg Arg Ser Arg Gly Ala Gly Ala  
35 40 45  
Ala Gly Pro Gln Pro Pro Leu Glu Arg Ala Asp Val Leu Asn Val Ser  
50 55 60  
Pro Gly Arg Cys Leu Pro His Gln Trp Lys Leu Ser Ser Cys Cys Lys  
65 70 75 80  
Thr Trp Leu Phe Xaa Glu Ser Phe Glu Ile His Arg Ser Thr Tyr Xaa  
85 90 95  
Val His Gln Arg Thr Xaa Gly Ala Gly Val Xaa Pro  
100 105

<210> 1287

<211> 214

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (164)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (193)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (203)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (207)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (210)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

&lt;222&gt; (211)

&lt;223&gt; xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1287

Gln Val Arg Phe Pro Ala Glu Glu Ala Ser Ser Pro Ala Pro Trp His  
1 5 10 15

Pro Lys Ala Ala Ala Arg Ala Leu Pro Gln Ala Leu Ala Asn Gly Ala  
20 25 30

Gln Leu Leu Leu Leu Gly Ser Ala Gly Pro Thr Met Glu Asn Gln Val  
35 40 45

Gln Thr Leu Thr Ser Tyr Leu Trp Ser Arg His Leu Pro Val Glu Pro  
50 55 60

Glu Glu Leu Gln Arg Arg Ala Arg His Leu Glu Lys Lys Phe Leu Glu  
65 70 75 80

Asn Pro Asp Leu Ser Gln Thr Glu Glu Lys Leu Arg Gly Ala Val Leu  
85 90 95

His Ala Leu Arg Lys Thr Thr Tyr His Trp Gln Glu Leu Ser Tyr Thr  
100 105 110

Glu Gly Leu Ser Leu Val Tyr Met Ala Ala Arg Leu Asp Gly Gly Phe  
115 120 125

Ala Ala Val Ser Arg Ala Phe His Glu Ile Arg Ala Arg Asn Pro Ala  
130 135 140

Phe Gln Pro Gln Thr Leu Met Asp Phe Gly Ser Gly Thr Gly Leu Ser  
145 150 155 160

Pro Gly Leu Xaa Thr Val Phe Gly Ala Arg Ala Tyr Val Asn Ile Trp  
165 170 175

Cys Gly Gln Ile Thr Cys Met Trp Phe Ala Glu Asn Ser Glu Arg Gly  
180 185 190

Xaa Ile Gly Ser Leu Tyr Ser Gly Leu Phe Xaa Ser Ser Thr Xaa Asn  
195 200 205

Gln Xaa Xaa Leu Met Ile  
210

&lt;210&gt; 1288

&lt;211&gt; 68

&lt;212&gt; PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (1)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (11)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1288

Xaa Ser Leu Asn Cys Gly Ser Ile Ser Thr Xaa Thr Asn Gln Gly Ser  
1 5 10 15

Pro Leu Ser Val Gly Tyr His Phe Pro Leu Leu Pro Pro Val Ile Phe  
20 25 30

Thr Phe Ser Thr Thr Gly Glu Leu Met Gly Ser Glu Gly Gln Met Tyr  
35 40 45

Phe Leu Phe Gly His Arg Gly Phe Pro Val Leu Cys Val Phe Leu Met  
50 55 60

Lys Glu Ser Leu  
65

<210> 1289

<211> 318

<212> PRT

<213> Homo sapiens

<400> 1289

Arg Leu Gln Val Val Gln Gln Trp Ile Gln Arg Ile Arg Gln Arg Pro  
1 5 10 15

Gly Cys Leu Trp Leu Leu Ala Val Ala Leu Leu Pro Trp Thr Cys Ala  
20 25 30

Ser Arg Ala Leu Gln His Leu Asp Pro Pro Ala Pro Leu Pro Leu Val  
35 40 45

Ile Trp His Gly Met Gly Asp Ser Cys Cys Asn Pro Leu Ser Met Gly  
50 55 60

Ala Ile Lys Lys Met Val Glu Lys Lys Ile Pro Gly Ile Tyr Val Leu  
65 70 75 80

Ser Leu Glu Ile Gly Lys Thr Leu Met Glu Asp Val Glu Asn Ser Phe  
                     85                    90                    95  
 Phe Leu Asn Val Asn Ser Gln Val Thr Thr Val Cys Gln Ala Leu Ala  
                     100                    105                    110  
 Lys Asp Pro Lys Leu Gln Gln Gly Tyr Asn Ala Met Gly Phe Ser Gln  
                     115                    120                    125  
 Gly Gly Gln Phe Leu Arg Ala Val Ala Gln Arg Cys Pro Ser Pro Pro  
                     130                    135                    140  
 Met Ile Asn Leu Ile Ser Val Gly Gly Gln His Gln Gly Val Phe Gly  
 145                    150                    155                    160  
 Leu Pro Arg Cys Pro Gly Glu Ser Ser His Ile Cys Asp Phe Ile Arg  
                     165                    170                    175  
 Lys Thr Leu Asn Ala Gly Ala Tyr Ser Lys Val Val Gln Glu Arg Leu  
                     180                    185                    190  
 Val Gln Ala Glu Tyr Trp His Asp Pro Ile Lys Glu Asp Val Tyr Arg  
                     195                    200                    205  
 Asn His Ser Ile Phe Leu Ala Asp Ile Asn Gln Glu Arg Gly Ile Asn  
                     210                    215                    220  
 Glu Ser Tyr Lys Lys Asn Leu Met Ala Leu Lys Lys Phe Val Met Val  
 225                    230                    235                    240  
 Lys Phe Leu Asn Asp Ser Ile Val Asp Pro Val Asp Ser Glu Trp Phe  
                     245                    250                    255  
 Gly Phe Tyr Arg Ser Gly Gln Ala Lys Glu Thr Ile Pro Leu Gln Glu  
                     260                    265                    270  
 Thr Ser Leu Tyr Thr Gln Asp Arg Leu Gly Leu Lys Glu Met Asp Asn  
                     275                    280                    285  
 Ala Gly Gln Leu Val Phe Leu Ala Thr Glu Gly Asp His Leu Gln Leu  
                     290                    295                    300  
 Ser Glu Glu Trp Phe Tyr Ala His Ile Ile Pro Phe Leu Gly  
 305                    310                    315

&lt;210&gt; 1290

&lt;211&gt; 119

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1290

Lys His Met Gly Ser Cys Arg Leu Leu Leu Cys Phe Phe Pro Leu Ser  
1 5 10 15  
Arg Trp Pro Gly Arg Asp Thr Thr Phe Cys Asn Gln Gly Thr Glu Asn  
20 25 30  
Arg Arg Ala Cys Ser Gln Gln Ala Asn Ser Leu Arg Tyr Lys Ile Thr  
35 40 45  
Tyr Arg Ser Cys Leu Arg Met Val Thr Asp Arg Pro Asp Cys Leu Gly  
50 55 60  
His Arg Asn Thr Ser Cys Phe Pro Leu Lys Lys Val Leu Pro Glu Ala  
65 70 75 80  
Phe Cys Leu Ser Ala Pro Cys Trp Ser Glu Val Gln Ala Asp Glu Asn  
85 90 95  
Pro Asp Ile Ala Cys Gly Gly Leu Gln Leu Arg Lys Val Gly Arg Glu  
100 105 110  
Ile Ile Leu Val Leu Val Gln  
115

&lt;210&gt; 1291

&lt;211&gt; 47

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (21)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (34)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (42)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1291

Ile Ser Asp Pro Tyr Ser Gln Gly Tyr Asn Tyr Ser Lys Lys Tyr Ile  
1 5 10 15

Gln Gly Lys Leu Xaa Leu Ile Ser Ser Leu Thr Tyr Arg Gly Asn Lys  
20 25 30

Thr Xaa Val Leu Gln Ile Gly Leu Gln Xaa His His Cys Ser Gly  
35 40 45

<210> 1292

<211> 275

<212> PRT

<213> Homo sapiens

<400> 1292

Gly Gly Ala Ser Asn Phe Leu Ser Trp Arg Glu Ser Ala Arg Trp Ser  
1 5 10 15

Arg Gln Leu Arg Arg Thr Leu Ile Arg Leu Ser Phe Pro Ile Ser Cys  
20 25 30

Gly Arg Ser His Ala Phe Gly Gly Cys Lys Met Ala Ala Thr Ser Gly  
35 40 45

Thr Asp Glu Pro Val Ser Gly Glu Leu Val Ser Val Ala His Ala Leu  
50 55 60

Ser Leu Pro Ala Glu Ser Tyr Gly Asn Asp Pro Asp Ile Glu Met Ala  
65 70 75 80

Trp Ala Met Arg Ala Met Gln His Ala Glu Val Tyr Tyr Lys Leu Ile  
85 90 95

Ser Ser Val Asp Pro Gln Phe Leu Lys Leu Thr Lys Val Asp Asp Gln  
100 105 110

Ile Tyr Ser Glu Phe Arg Lys Asn Phe Glu Thr Leu Arg Ile Asp Val  
115 120 125

Leu Asp Pro Glu Glu Leu Lys Ser Glu Ser Ala Lys Glu Lys Trp Arg  
130 135 140

Pro Phe Cys Leu Lys Phe Asn Gly Ile Val Glu Asp Phe Asn Tyr Gly  
145 150 155 160

Thr Leu Leu Arg Leu Asp Cys Ser Gln Gly Tyr Thr Glu Glu Asn Thr  
165 170 175

Ile Phe Ala Pro Arg Ile Gln Phe Phe Ala Ile Glu Ile Ala Arg Asn  
180 185 190

Arg Glu Gly Tyr Asn Lys Ala Val Tyr Ile Ser Val Gln Asp Lys Glu  
 195 200 205

Gly Glu Lys Gly Val Asn Asn Gly Gly Glu Lys Arg Ala Asp Ser Gly  
 210 215 220

Glu Glu Glu Asn Thr Lys Asn Gly Gly Glu Lys Gly Ala Asp Ser Gly  
 225 230 235 240

Glu Glu Lys Glu Glu Gly Ile Asn Arg Glu Asp Lys Thr Asp Lys Gly  
 245 250 255

Gly Glu Lys Gly Lys Glu Ala Asp Lys Glu Ile Asn Lys Ser Gly Glu  
 260 265 270

Lys Ala Met  
 275

<210> 1293

<211> 263

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (32)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (86)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1293

Gln Ile His Gly Gln Val Val Gly Thr Val Thr Cys Lys Cys Asp Leu  
 1 5 10 15

Glu Gly Ile Met Pro Asn Val Thr Ile Ser Leu Ser Leu Pro Thr Xaa  
 20 25 30

Gly Ser Pro Leu Gln Asp Ile Leu Val His Pro Cys Val Thr Ser Leu  
 35 40 45

Asp Ser Ala Ile Leu Thr Ser Ser Ser Ile Asp Ala Met Asp Asp Ser  
 50 55 60

Ala Phe Ser Gly Pro Tyr Lys Phe Pro Phe Thr Pro Pro Leu Glu Ser  
 65 70 75 80



Phe Asn Leu Cys Phe Xaa Thr Ser Gln Val Pro Val Pro Pro Ile Leu  
                     85                    90                    95  
 Gly Phe Tyr Gln Met Lys Glu Glu Glu Val Gln Leu Arg Ile Thr Ile  
                     100                    105                    110  
 Asn Leu Lys Leu His Glu Ser Val Lys Asn Asn Phe Glu Phe Cys Glu  
                     115                    120                    125  
 Ala His Ile Pro Phe Tyr Asn Arg Gly Pro Ile Thr His Leu Glu Tyr  
                     130                    135                    140  
 Lys Thr Ser Phe Gly Gln Leu Glu Val Phe Arg Glu Lys Ser Leu Leu  
 145                    150                    155                    160  
 Ile Trp Ile Ile Gly Gln Lys Phe Pro Lys Ser Met Glu Ile Ser Leu  
                     165                    170                    175  
 Ser Gly Thr Val Thr Phe Gly Ala Lys Ser His Glu Lys Gln Pro Phe  
                     180                    185                    190  
 Asp Pro Ile Cys Thr Gly Glu Thr Ala Tyr Leu Lys Leu His Phe Arg  
                     195                    200                    205  
 Ile Leu Asp Tyr Thr Leu Thr Gly Cys Tyr Ala Asp Gln His Ser Val  
                     210                    215                    220  
 Gln Val Phe Ala Ser Gly Lys Pro Lys Ile Ser Ala His Arg Lys Leu  
 225                    230                    235                    240  
 Ile Ser Ser Asp Tyr Tyr Ile Trp Asn Ser Lys Ala Pro Ala Pro Val  
                     245                    250                    255  
 Thr Tyr Gly Ser Leu Leu Leu  
                     260

&lt;210&gt; 1294

&lt;211&gt; 120

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (89)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1294

Pro Thr Arg Pro Pro Thr Arg Pro Pro Thr Arg Pro Arg Ser Cys Leu  
 1                    5                    10                    15

Val Met Ser Gly Arg Gly Lys Gly Gly Lys Gly Leu Gly Lys Gly Gly  
20 25 30

Ala Lys Arg His Arg Lys Val Leu Arg Asp Asn Ile Gln Gly Ile Thr  
35 40 45

Lys Pro Ala Ile Arg Arg Leu Ala Arg Arg Gly Gly Val Lys Arg Ile  
50 55 60

Ser Gly Leu Ile Tyr Glu Glu Thr Arg Gly Val Leu Lys Val Phe Leu  
65 70 75 80

Glu Asn Val Ile Arg Asp Ala Val Xaa Tyr Thr Glu His Ala Lys Arg  
85 90 95

Lys Thr Val Thr Ala Met Asp Val Val Tyr Ala Leu Lys Arg Gln Gly  
100 105 110

Arg Thr Leu Tyr Gly Phe Gly Gly  
115 120

<210> 1295

<211> 174

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (43)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (44)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (155)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (158)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (160)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (168)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1295

Lys Thr Gly Asn Gly Arg Val Tyr Pro His Pro Gln Asp Leu Leu Ala  
1 5 10 15

Ala Leu Pro Leu Ala Leu Val Leu Leu Ala Met Arg Leu Ala Phe Glu  
20 25 30

Lys Ile His Trp Pro Ala Pro Glu Pro Val Xaa Xaa Cys Glu Gly Ser  
35 40 45

Asp Gln Glu Ala Ser Glu Ala Gln Arg His Ala Gly Glu Thr Leu Pro  
50 55 60

His Gly Arg Ala Gln Ala Lys Glu Pro Gln Leu Ser Leu Leu Ala Ala  
65 70 75 80

Gln Cys Gly Leu Thr Leu Gln Gln Thr Gln Arg Trp Phe Arg Arg Arg  
85 90 95

Arg Asn Gln Asp Arg Pro Gln Leu Thr Lys Lys Phe Cys Glu Ala Ser  
100 105 110

Trp Arg Phe Leu Phe Tyr Leu Ser Ser Phe Val Gly Gly Leu Ser Val  
115 120 125

Leu Tyr His Glu Ser Trp Leu Trp Ala Pro Val Met Cys Trp Asp Arg  
130 135 140

Tyr Pro Asn Gln Thr Leu Lys Pro Ser Leu Xaa Trp Trp Xaa Leu Xaa  
145 150 155 160

Gly Ala Gly Phe Leu Thr Ser Xaa Cys Leu Ile Arg Cys Leu  
165 170

<210> 1296

<211> 286

<212> PRT

<213> Homo sapiens

<400> 1296

Ala His Ser Ser Ile Pro Ala Lys His Arg Asn Met Thr Glu Met Ser

1	5	10	15
Phe Leu Ser Ser Glu Val Leu Val Gly Asp Leu Met Ser Pro Phe Asp	20	25	30
Gln Ser Gly Leu Gly Ala Glu Glu Ser Leu Gly Leu Leu Asp Asp Tyr	35	40	45
Leu Glu Val Ala Lys His Phe Lys Pro His Gly Phe Ser Ser Asp Lys	50	55	60
Ala Lys Ala Gly Ser Ser Glu Trp Leu Ala Val Asp Gly Leu Val Ser	65	70	75
Pro Ser Asn Asn Ser Lys Glu Asp Ala Phe Ser Gly Thr Asp Trp Met	85	90	95
Leu Glu Lys Met Asp Leu Lys Glu Phe Asp Leu Asp Ala Leu Leu Gly	100	105	110
Ile Asp Asp Leu Glu Thr Met Pro Asp Asp Leu Leu Thr Thr Leu Asp	115	120	125
Asp Thr Cys Asp Leu Phe Ala Pro Leu Val Gln Glu Thr Asn Lys Gln	130	135	140
Pro Pro Gln Thr Val Asn Pro Ile Gly His Leu Pro Glu Ser Leu Thr	145	150	155
Lys Pro Asp Gln Val Ala Pro Phe Thr Phe Leu Gln Pro Leu Pro Leu	165	170	175
Ser Pro Gly Val Leu Ser Ser Thr Pro Asp His Ser Phe Ser Leu Glu	180	185	190
Leu Gly Ser Glu Val Asp Ile Thr Glu Gly Asp Arg Lys Pro Asp Tyr	195	200	205
Thr Ala Tyr Val Ala Met Ile Pro Gln Cys Ile Lys Glu Glu Asp Thr	210	215	220
Pro Ser Asp Asn Asp Ser Gly Ile Cys Met Ser Pro Glu Ser Tyr Leu	225	230	235
Gly Ser Pro Gln His Ser Pro Ser Thr Arg Gly Ser Pro Asn Arg Ser	245	250	255
Leu Pro Ser Ser Arg Cys Ser Leu Trp Val Cys Pro Ser Gln Thr Leu	260	265	270
Arg Ser Ser Trp Arg Glu Asp Gly Ser Ser Lys Ser Lys Gly			

275

280

285

&lt;210&gt; 1297

&lt;211&gt; 169

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1297

Ala Ala Arg Gly Arg Ala Ala Ala Glu His Pro Ala Gly Ala Asp Ser  
1 5 10 15

Met Ala Ser Pro Asp Pro Pro Ala Thr Ser Tyr Ala Pro Ser Asp Val  
20 25 30

Pro Ser Gly Val Ala Leu Phe Leu Thr Ile Pro Phe Ala Phe Phe Leu  
35 40 45

Pro Glu Leu Ile Phe Gly Phe Leu Val Trp Thr Met Val Ala Ala Thr  
50 55 60

His Ile Val Tyr Pro Leu Leu Gln Gly Trp Val Met Tyr Val Ser Leu  
65 70 75 80

Thr Ser Phe Leu Ile Ser Leu Met Phe Leu Leu Ser Tyr Leu Phe Gly  
85 90 95

Phe Tyr Lys Arg Phe Glu Ser Trp Arg Val Leu Asp Ser Leu Tyr His  
100 105 110

Gly Thr Thr Gly Ile Leu Tyr Met Ser Ala Ala Val Leu Gln Val His  
115 120 125

Ala Thr Ile Val Ser Glu Lys Leu Leu Asp Pro Arg Ile Tyr Tyr Ile  
130 135 140

Asn Ser Ala Ala Ser Phe Phe Ala Phe Ile Ala Thr Leu Leu Tyr Ile  
145 150 155 160

Leu His Ala Phe Ser Ile Tyr Tyr His  
165

&lt;210&gt; 1298

&lt;211&gt; 164

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1298

Ala Leu Arg Asn Glu Met Ala Val Leu Trp Arg Leu Ser Ala Val Cys  
1 5 10 15  
Gly Ala Leu Gly Gly Arg Ala Leu Leu Leu Arg Thr Pro Val Val Arg  
20 25 30  
Pro Ala His Ile Ser Ala Phe Leu Gln Asp Arg Pro Ile Pro Glu Trp  
35 40 45  
Cys Gly Val Gln His Ile His Leu Ser Pro Ser His His Ser Gly Ser  
50 55 60  
Lys Ala Ala Ser Leu His Trp Thr Ser Glu Arg Val Val Ser Val Leu  
65 70 75 80  
Leu Leu Gly Leu Leu Pro Ala Ala Tyr Leu Asn Pro Cys Ser Ala Met  
85 90 95  
Asp Tyr Ser Leu Ala Ala Ala Leu Thr Leu His Gly His Trp Gly Leu  
100 105 110  
Gly Gln Val Val Thr Asp Tyr Val His Gly Asp Ala Leu Gln Lys Ala  
115 120 125  
Ala Lys Ala Gly Leu Leu Ala Leu Ser Ala Leu Thr Phe Ala Gly Leu  
130 135 140  
Cys Tyr Phe Asn Tyr His Asp Val Gly Ile Cys Lys Ala Val Ala Met  
145 150 155 160  
Leu Trp Lys Leu

<210> 1299

<211> 717

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (39)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (147)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE  
 <222> (181)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (232)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (379)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (389)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (671)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 1299  
 Val Cys Leu Gln Arg Asp Ala Pro Arg Gly Gln Ala Arg Ser Pro Gly  
   1                  5                  10                  15  
 Glu Ala Gln Glu Pro Glu Glu Leu Ala Arg Arg Gln Arg Arg His Pro  
                   20                  25                  30  
 Glu Leu Ser Gln Gly Glu Xaa Val Ala Ser Val Ile Ile Tyr Arg Thr  
           35                  40                  45  
 Leu Ala Gly Leu Leu Pro His Asn Tyr Asp Pro Asp Lys Arg Ser Leu  
       50                  55                  60  
 Arg Val Pro Lys Arg Pro Ile Ile Asn Thr Pro Val Val Ser Ile Ser  
   65                  70                  75                  80  
 Val His Asp Asp Glu Glu Leu Leu Pro Arg Ala Leu Asp Lys Pro Val  
                   85                  90                  95  
 Thr Val Gln Phe Arg Leu Leu Glu Thr Glu Glu Arg Thr Lys Pro Ile  
           100                  105                  110  
 Cys Val Phe Trp Asn His Ser Ile Leu Val Ser Gly Thr Gly Gly Trp  
       115                  120                  125  
 Ser Ala Arg Gly Cys Glu Val Val Phe Arg Asn Glu Ser His Val Ser  
       130                  135                  140

Cys Gln Xaa Asn His Met Thr Ser Phe Ala Val Leu Met Asp Val Ser  
 145 150 155 160  
 Arg Arg Glu Asn Gly Glu Ile Leu Pro Leu Lys Thr Leu Thr Tyr Val  
 165 170 175  
 Ala Leu Gly Val Xaa Leu Ala Ala Leu Leu Leu Thr Phe Phe Phe Leu  
 180 185 190  
 Thr Leu Leu Arg Ile Leu Arg Ser Asn Gln His Gly Ile Arg Arg Asn  
 195 200 205  
 Leu Thr Ala Ala Leu Gly Leu Ala Gln Leu Val Phe Leu Leu Gly Ile  
 210 215 220  
 Asn Gln Ala Asp Leu Pro Phe Xaa Cys Thr Val Ile Ala Ile Leu Leu  
 225 230 235 240  
 His Phe Leu Tyr Leu Cys Thr Phe Ser Trp Ala Leu Leu Glu Ala Leu  
 245 250 255  
 His Leu Tyr Arg Ala Leu Thr Glu Val Arg Asp Val Asn Thr Gly Pro  
 260 265 270  
 Met Arg Phe Tyr Tyr Met Leu Gly Trp Gly Val Pro Ala Phe Ile Thr  
 275 280 285  
 Gly Leu Ala Val Gly Leu Asp Pro Glu Gly Tyr Gly Asn Pro Asp Phe  
 290 295 300  
 Cys Trp Leu Ser Ile Tyr Asp Thr Leu Ile Trp Ser Phe Gly Gly Pro  
 305 310 315 320  
 Val Ala Phe Ala Val Ser Met Ser Val Phe Leu Tyr Ile Leu Ala Ala  
 325 330 335  
 Arg Ala Ser Cys Ala Ala Gln Arg Gln Gly Phe Glu Lys Lys Gly Pro  
 340 345 350  
 Val Ser Gly Leu Gln Pro Ser Phe Ala Val Leu Leu Leu Leu Ser Ala  
 355 360 365  
 Thr Trp Leu Leu Ala Leu Leu Ser Val Asn Xaa Asp Thr Leu Leu Phe  
 370 375 380  
 His Tyr Leu Phe Xaa Thr Cys Asn Cys Ile Gln Gly Pro Phe Ile Phe  
 385 390 395 400  
 Leu Ser Tyr Val Val Leu Ser Lys Glu Val Arg Lys Ala Leu Lys Leu  
 405 410 415



Ala Cys Ser Arg Lys Pro Ser Pro Asp Pro Ala Leu Thr Thr Lys Ser  
420 425 430

Thr Leu Thr Ser Ser Tyr Asn Cys Pro Ser Pro Tyr Ala Asp Gly Arg  
435 440 445

Leu Tyr Gln Pro Tyr Gly Asp Ser Ala Gly Ser Leu His Ser Thr Ser  
450 455 460

Arg Ser Gly Lys Ser Gln Pro Ser Tyr Ile Pro Phe Leu Leu Arg Glu  
465 470 475 480

Glu Ser Ala Leu Asn Pro Gly Gln Gly Pro Pro Gly Leu Gly Asp Pro  
485 490 495

Gly Ser Leu Phe Leu Glu Gly Gln Asp Gln Gln His Asp Pro Asp Thr  
500 505 510

Asp Ser Asp Ser Asp Leu Ser Leu Glu Asp Asp Gln Ser Gly Ser Tyr  
515 520 525

Ala Ser Thr His Ser Ser Asp Ser Glu Glu Glu Glu Glu Glu Glu  
530 535 540

Glu Glu Ala Ala Phe Pro Gly Glu Gln Gly Trp Asp Ser Leu Leu Gly  
545 550 555 560

Pro Gly Ala Glu Arg Leu Pro Leu His Ser Thr Pro Lys Asp Gly Gly  
565 570 575

Pro Gly Pro Gly Lys Ala Pro Trp Pro Gly Asp Phe Gly Thr Thr Ala  
580 585 590

Lys Glu Ser Ser Gly Asn Gly Ala Pro Glu Glu Arg Leu Arg Glu Asn  
595 600 605

Gly Asp Ala Leu Ser Arg Glu Gly Ser Leu Gly Pro Leu Pro Gly Ser  
610 615 620

Ser Ala Gln Pro His Lys Gly Ile Leu Lys Lys Lys Cys Leu Pro Thr  
625 630 635 640

Ile Ser Glu Lys Ser Ser Leu Leu Arg Leu Pro Leu Glu Gln Cys Thr  
645 650 655

Gly Ser Ser Arg Gly Ser Ser Ala Ser Glu Gly Ser Arg Gly Xaa Pro  
660 665 670

Pro Pro Arg Pro Pro Pro Arg Gln Ser Leu Gln Glu Gln Leu Asn Gly  
675 680 685

Val Met Pro Ile Ala Met Ser Ile Lys Ala Gly Thr Val Asp Glu Asp  
690 695 700

Ser Ser Gly Ser Glu Phe Leu Phe Phe Asn Phe Leu His  
705 710 715

<210> 1300  
<211> 145  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (25)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (31)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (111)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (112)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (116)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (124)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (125)  
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1300  
Ala Ser Arg Asn Ala Asp Leu Ser Ile Thr Leu Gly Thr Ser Leu Gln

1	5	10	15
Ile Arg Pro Ser Gly Asn Leu Pro Xaa Ala Thr Lys Arg Arg Xaa Gly	20	25	30
Arg Leu Val Ile Val Asn Leu Gln Pro Thr Lys His Asp Arg His Ala	35	40	45
Asp Leu Arg Ile His Gly Tyr Val Asp Glu Val Met Thr Arg Leu Met	50	55	60
Lys His Leu Gly Leu Glu Ile Pro Ala Trp Asp Gly Pro Arg Val Leu	65	70	75
Glu Arg Ala Leu Pro Pro Leu Pro Ala Arg Pro Pro Pro Ser Trp Ser	85	90	95
Pro Arg Arg Asn Leu Pro Pro Gly Ser Thr Ala Leu Ser Pro Xaa Xaa	100	105	110
Pro Ser Arg Xaa Pro Ala Pro Ser Thr Thr Ala Xaa Xaa Pro Pro Ala	115	120	125
Pro Asn Gly Ser Gly Pro Pro Ala Leu Pro Pro Thr Asp Pro Pro Lys	130	135	140
Gly			
145			

<210> 1301

<211> 68

<212> PRT

<213> Homo sapiens

<220>

&lt;221&gt; SITE

<222> (67)

<223> Xaa equals any of the naturally occurring L-amino acids

**<220>**

<221> SITE

<222> (68)

<223> xaa equals any of the naturally occurring L-amino acids

<400> 1301

Thr Arg Cys Leu Leu Lys Ile Gln Lys Ile Ser Gln Val Trp Trp His  
1 5 10 15

Asn Ala Val Ile Pro Ala Thr Gln Glu Ala Glu Ala Gly Glu Ser Leu

20 25 30  
 Glu Pro Gly Arg Trp Glu Val Thr Val Ser Gln Val Cys Ala Thr Ala  
 35 40 45  
 Phe Gln Pro Gly Leu Ile Glu Trp Asp Phe Arg Leu Gln Lys Lys Lys  
 50 55 60  
 Lys Lys Xaa Xaa  
 65

<210> 1302  
 <211> 60  
 <212> PRT  
 <213> Homo sapiens

<400> 1302  
 Lys Tyr Pro Val Pro Arg Pro Leu Phe Thr His Ala Cys Lys Phe Thr  
 1 5 10 15  
 Gly Lys Thr Leu Glu Thr Asn Val Leu Ser Ser Thr Glu Ile Trp Pro  
 20 25 30  
 Ser Ser Leu Phe Leu Asn Cys Ser Leu Cys Val Arg His Ile Cys Leu  
 35 40 45  
 Ile Pro His Ser Ala Leu Thr Phe Arg Gln Ile Arg  
 50 55 60

<210> 1303  
 <211> 107  
 <212> PRT  
 <213> Homo sapiens

<400> 1303  
 Arg Ser Asp Ser Arg Ser Thr His Ala Ser Gly Arg Leu Arg Thr Ala  
 1 5 10 15  
 Gln Leu Ala Pro Pro Gly Leu Gly Arg Thr Arg Ser Gly Phe Ser Ser  
 20 25 30  
 Cys Arg Pro Tyr Gly Ala Val Phe Ser Leu Ser Arg Gly Val Arg Ala  
 35 40 45  
 Ser His Ala Gly Pro Gly Arg Glu Lys Ser Lys Ala Cys Arg Gly Cys  
 50 55 60

Arg Glu Lys Thr Lys Arg Gly Cys Ile Ser Gly Asn Phe Arg Cys Ser  
65 70 75 80

Ile Cys Ala Arg Lys Glu Lys Glu Lys Gly Lys Asn Arg Lys Thr Asn  
85 90 95

Cys Tyr Ile Arg Ala Pro Thr Arg Arg Trp Thr  
100 105

<210> 1304

<211> 69

<212> PRT

<213> Homo sapiens

<400> 1304

Lys His Ile Phe Trp Leu Ala Glu Lys Asn Lys Thr Lys Leu Leu Phe  
1 5 10 15

Leu Phe Leu Ala Leu Arg Val Tyr Ser Lys Arg Asp Phe Phe Glu Leu  
20 25 30

Phe Leu Tyr Tyr Phe Ser Phe Asn Cys Ala Val Val His Glu Thr Glu  
35 40 45

Leu Leu Cys Phe Ser Val Arg Asp Gly Lys Gly Phe Phe Ser Ile Ser  
50 55 60

Phe Met Cys Gly Ile  
65

<210> 1305

<211> 75

<212> PRT

<213> Homo sapiens

<400> 1305

Lys Asn Val Ile Gly Thr Ile Asn Lys Asp Cys Glu Arg Leu Phe Lys  
1 5 10 15

Ser Cys Glu Ser Leu Lys Pro Ile Ser Gln Gly Val Pro Cys Leu Asn  
20 25 30

Leu Leu Leu Phe Pro Gln Arg Thr Lys Pro Val His Lys Leu Pro Lys  
35 40 45

Leu Pro Phe Trp Arg Trp Lys Leu Thr Arg Arg Glu Gly Leu Leu Leu  
50 55 60

Glu Ser Ile Gln Tyr Lys Gln Ile Ile Leu Pro  
65 70 75

<210> 1306  
<211> 44  
<212> PRT  
<213> Homo sapiens

<400> 1306  
Pro Thr Trp Arg Asn Pro Val Ser Thr Lys Asn Thr Lys Ile Ser Trp  
1 5 10 15  
Ala Leu Trp Arg Ala Pro Val Ile Pro Ala Thr Trp Glu Ala Glu Ala  
20 25 30  
Glu Glu Ser Leu Lys Pro Arg Arg Arg Arg Leu Gln  
35 40

<210> 1307  
<211> 105  
<212> PRT  
<213> Homo sapiens

<400> 1307  
Arg Leu Cys Ala Phe Asn Lys Arg Met Thr Phe Gln Phe Asn Phe Thr  
1 5 10 15  
Ile Glu Asp His Leu Glu Asn Glu Leu Thr Pro Ile Arg Asp Gly Ala  
20 25 30  
Leu Thr Leu Asp Ser Ser Lys Glu Leu Ser Val Ser Glu Ser Gln Lys  
35 40 45  
Gly Glu Glu Arg Asp Arg Lys Cys Ser Ala Glu Gln Phe Asp Leu Pro  
50 55 60  
Gln Asp His Leu Trp Glu His Lys Ser Met Glu Asn Ala Ala Pro Ser  
65 70 75 80  
Gln Asp Thr Asp Ser Pro Leu Ser Ala Ala Ser Ser Ser Arg Asn Leu  
85 90 95  
Gly Ala Thr Trp Glu Asn Ser Pro Pro  
100 105

<210> 1308  
<211> 75  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (13)  
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1308  
Gly Arg Ala His Ala Ile Thr Val Ser Val Ala Asn Xaa Lys Ala Leu  
1 5 10 15  
Ala Lys Cys Glu Lys Tyr Met Leu Thr His Gln Glu Leu Ala Ser Asp  
20 25 30  
Gly Glu Ile Glu Thr Lys Leu Ile Lys Gly Asp Ile Tyr Lys Thr Arg  
35 40 45  
Gly Gly Gly Gln Ser Val Gln Phe Thr Asp Ile Glu Thr Leu Lys Gln  
50 55 60  
Glu Ser Pro Asn Gly Val Leu Trp Leu Trp Arg  
65 70 75

<210> 1309  
<211> 231  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (178)  
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1309  
Leu Glu Arg Phe Ala Ser Arg Arg Pro Gln Val Leu Ala Val Arg Thr  
1 5 10 15  
Val Cys Asp Leu Val Leu Gly Lys Met Asp Lys Asp Cys Glu Met Lys  
20 25 30  
Arg Thr Thr Leu Asp Ser Pro Leu Gly Lys Leu Glu Leu Ser Gly Cys  
35 40 45  
Glu Gln Gly Leu His Glu Ile Lys Leu Leu Gly Lys Gly Thr Ser Ala  
50 55 60

Ala Asp Ala Val Glu Val Pro Ala Pro Ala Ala Val Leu Gly Gly Pro  
 65 70 75 80  
 Glu Pro Leu Met Gln Cys Thr Ala Trp Leu Asn Ala Tyr Phe His Gln  
 85 90 95  
 Pro Glu Ala Ile Glu Glu Phe Pro Val Pro Ala Leu His His Pro Val  
 100 105 110  
 Phe Gln Gln Glu Ser Phe Thr Arg Gln Val Leu Trp Lys Leu Leu Lys  
 115 120 125  
 Val Val Lys Phe Gly Glu Val Ile Ser Tyr Gln Gln Leu Ala Ala Leu  
 130 135 140  
 Ala Gly Asn Pro Lys Ala Ala Arg Ala Val Gly Gly Ala Met Arg Gly  
 145 150 155 160  
 Asn Pro Val Pro Ile Leu Ile Pro Cys His Arg Val Val Cys Ser Ser  
 165 170 175  
 Gly Xaa Val Gly Asn Tyr Ser Gly Gly Leu Ala Val Lys Glu Trp Leu  
 180 185 190  
 Leu Ala His Glu Gly His Arg Leu Gly Lys Pro Gly Leu Gly Gly Ser  
 195 200 205  
 Ser Gly Leu Ala Gly Ala Trp Leu Lys Gly Ala Gly Ala Thr Ser Gly  
 210 215 220  
 Ser Pro Pro Ala Gly Arg Asn  
 225 230

&lt;210&gt; 1310

&lt;211&gt; 110

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1310

Pro Val Leu Thr Pro Ala Thr Leu Ile Tyr Phe Ser Ile Asn Cys Leu  
 1 5 10 15  
 Ser Gly Ser Gln Ser Trp Asn His His Ser Gly Arg Gly Leu Ala Cys  
 20 25 30  
 Thr Arg Met Phe Glu Val Val Ser Ser Thr Ser Gly Leu Ser Ile Cys  
 35 40 45



Gly Glu Arg Cys Val Ala Ile Ala Ala Gly Leu His Gly His Leu Ser  
 50 55 60

Thr Thr Arg Val Leu Trp Thr Trp Ser Asn His Arg Glu Arg Leu Arg  
 65 70 75 80

Val Glu Phe Cys Leu Cys Arg Gly Thr Gly Ala Val Trp Trp Glu Arg  
 85 90 95

Pro Val Pro Gly Glu Thr Leu Glu Thr Leu Arg Glu Pro Leu  
 100 105 110

<210> 1311

<211> 139

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (6)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1311

Ala Val Val Thr Ala Xaa Gln Val Pro Lys Gln Val Ser Trp Val Gln  
 1 5 10 15

Gln Asp Thr Pro Pro Phe Gln Gly Ser Trp Tyr Arg Gln Lys Gln Glu  
 20 25 30

Trp Val Leu Ser Cys Cys Arg His Thr Ala Val Val Phe Leu Gln Leu  
 35 40 45

Ser Asn Lys Arg Leu Ser His Arg Pro Glu Leu Pro Trp Tyr Val Val  
 50 55 60

Lys Ser Lys Thr Ser Ser Leu Gly Tyr Leu Ser Ser Phe Met Lys Gln  
 65 70 75 80

Val Leu Arg Thr Arg Lys Asn His Leu Pro Pro Ser Phe Val Arg Gln  
 85 90 95

Asn Gln Val Lys Gly Asn Met Leu Glu Asn Val Pro Arg Glu Asp Thr  
 100 105 110

Ser Thr Phe Ala Leu Ser Asn Pro Ser Ser Glu Lys Gly Val Pro Trp  
 115 120 125

Pro Gln Lys Glu Leu Pro Ser Phe Gly Glu Glu  
 130 135

&lt;210&gt; 1312

&lt;211&gt; 231

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1312

Ala Glu Ala Glu Val Thr Pro Pro Glu Glu Gln Gln Glu Ala Glu Glu  
 1 5 10 15  
 Pro Lys Ala Arg Val Leu Arg Ser Lys Ser Leu Cys His Asp Glu Ile  
 20 25 30  
 Glu Asn Leu Leu Asp Ser Asp His Arg Glu Leu Ile Gly Asp Tyr Ser  
 35 40 45  
 Lys Ala Phe Leu Leu Gln Thr Val Asp Gly Lys His Gln Asp Leu Lys  
 50 55 60  
 Tyr Ile Ser Pro Glu Thr Met Val Ala Leu Leu Thr Gly Lys Phe Ser  
 65 70 75 80  
 Asn Ile Val Asp Lys Phe Val Ile Val Asp Cys Arg Tyr Pro Tyr Glu  
 85 90 95  
 Tyr Glu Gly Gly His Ile Lys Thr Ala Val Asn Leu Pro Leu Glu Arg  
 100 105 110  
 Asp Ala Glu Ser Phe Leu Leu Lys Ser Pro Ile Ala Pro Cys Ser Leu  
 115 120 125  
 Asp Lys Arg Val Ile Leu Ile Phe His Cys Glu Phe Ser Ser Glu Arg  
 130 135 140  
 Gly Pro Arg Met Cys Arg Phe Ile Arg Glu Arg Asp Arg Ala Val Asn  
 145 150 155 160  
 Asp Tyr Pro Ser Leu Tyr Tyr Pro Glu Met Tyr Ile Leu Lys Gly Gly  
 165 170 175  
 Tyr Lys Glu Phe Phe Pro Gln His Pro Asn Phe Cys Glu Pro Gln Asp  
 180 185 190  
 Tyr Arg Pro Met Asn His Glu Ala Phe Lys Asp Glu Leu Lys Thr Phe  
 195 200 205  
 Arg Leu Lys Thr Arg Ser Trp Ala Gly Glu Arg Ser Arg Arg Glu Leu  
 210 215 220

Cys Ser Arg Leu Gln Asp Gln  
225 230

<210> 1313  
<211> 312  
<212> PRT  
<213> Homo sapiens

<400> 1313

Ala Ala Val Ile Pro Ser Leu Gly Phe Leu Pro Gly Leu Pro Arg Ala  
1 5 10 15  
Arg Ser Arg Ala Gly Pro Glu Gln Pro Lys Met Ala Asp Phe Asp Asp  
20 25 30  
Arg Val Ser Asp Glu Glu Lys Val Arg Ile Ala Ala Lys Phe Ile Thr  
35 40 45  
His Ala Pro Pro Gly Glu Phe Asn Glu Val Phe Asn Asp Val Arg Leu  
50 55 60  
Leu Leu Asn Asn Asp Asn Leu Leu Arg Glu Gly Ala Ala His Ala Phe  
65 70 75 80  
Ala Gln Tyr Asn Met Asp Gln Phe Thr Pro Val Lys Ile Glu Gly Tyr  
85 90 95  
Glu Asp Gln Val Leu Ile Thr Glu His Gly Asp Leu Gly Asn Ser Arg  
100 105 110  
Phe Leu Asp Pro Arg Asn Lys Ile Ser Phe Lys Phe Asp His Leu Arg  
115 120 125  
Lys Glu Ala Ser Asp Pro Gln Pro Glu Glu Ala Asp Gly Gly Leu Lys  
130 135 140  
Ser Trp Arg Glu Ser Cys Asp Ser Ala Leu Arg Ala Tyr Val Lys Asp  
145 150 155 160  
His Tyr Ser Asn Gly Phe Cys Thr Val Tyr Ala Lys Thr Ile Asp Gly  
165 170 175  
Gln Gln Thr Ile Ile Ala Cys Ile Glu Ser His Gln Phe Gln Pro Lys  
180 185 190  
Asn Phe Trp Asn Gly Arg Trp Arg Ser Glu Trp Lys Phe Thr Ile Thr  
195 200 205  
Pro Pro Thr Ala Gln Val Val Gly Val Leu Lys Ile Gln Val His Tyr

210	215	220
Tyr Glu Asp Gly Asn Val Gln Leu Val Ser His Lys Asp Val Gln Asp		
225	230	235 240
Ser Leu Thr Val Ser Asn Glu Ala Gln Thr Ala Lys Glu Phe Ile Lys		
245	250	255
Ile Ile Glu Asn Ala Glu Asn Glu Tyr Gln Thr Ala Ile Ser Glu Asn		
260	265	270
Tyr Gln Thr Met Ser Asp Thr Thr Phe Lys Ala Leu Arg Arg Gln Leu		
275	280	285
Pro Val Thr Arg Thr Lys Ile Asp Trp Asn Lys Ile Leu Ser Tyr Lys		
290	295	300
Ile Gly Lys Glu Met Gln Asn Ala		
305	310	

<210> 1314  
 <211> 260  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (234)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (246)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (249)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (256)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 1314  
 Ala Phe Asn Ala Leu Val Thr Phe Cys Ile Arg Asp Leu Ile Gly Cys  
 1 5 10 15

Leu Gln Lys Leu Leu Phe Gly Lys Val Ala Lys Asp Ser Ser Arg Met  
20 25 30

Leu Gln Pro Ser Ser Ser Pro Leu Trp Gly Lys Leu Arg Val Asp Ile  
35 40 45

Lys Ala Tyr Leu Gly Ser Ala Ile Gln Leu Val Ser Cys Leu Ser Glu  
50 55 60

Thr Thr Val Leu Ala Ala Val Leu Arg His Ile Ser Val Leu Val Pro  
65 70 75 80

Cys Phe Leu Thr Phe Pro Lys Gln Cys Arg Met Leu Leu Lys Arg Met  
85 90 95

Val Val Val Trp Ser Thr Gly Glu Glu Ser Leu Arg Val Leu Ala Phe  
100 105 110

Leu Val Leu Ser Arg Val Cys Arg His Lys Lys Asp Thr Phe Leu Gly  
115 120 125

Pro Val Leu Lys Gln Met Tyr Ile Thr Tyr Val Arg Asn Cys Lys Phe  
130 135 140

Thr Ser Pro Gly Ala Leu Pro Phe Ile Ser Phe Met Gln Trp Thr Leu  
145 150 155 160

Thr Glu Leu Leu Ala Leu Glu Pro Gly Val Ala Tyr Gln His Ala Phe  
165 170 175

Leu Tyr Ile Arg Gln Leu Ala Ile His Leu Arg Asn Ala Met Thr Thr  
180 185 190

Arg Lys Lys Glu Thr Tyr Gln Ser Val Tyr Asn Trp Gln Tyr Val His  
195 200 205

Cys Leu Phe Leu Trp Cys Arg Val Leu Ser Thr Ala Gly Pro Ser Glu  
210 215 220

Ala Ser Ser Pro Trp Ser Asn Pro Leu Xaa Pro Ser His His Trp Leu  
225 230 235 240

Tyr Gln Ala His Pro Xaa Cys Pro Xaa Leu Thr Arg Cys Glu Cys Xaa  
245 250 255

Ala Ser Val Ala  
260

&lt;210&gt; 1315

<211> 194  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (158)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (160)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (174)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (175)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (183)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (189)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (193)  
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1315  
Arg Ser Arg Leu Trp Ala Pro Val Arg Glu Ser His Thr Tyr Leu Arg  
1 5 10 15

Met Pro Gly Leu Ser Cys Arg Phe Tyr Gln His Lys Phe Pro Glu Val  
20 25 30

Glu Asp Val Val Met Val Asn Val Arg Ser Ile Ala Glu Met Gly Ala  
35 40 45

Tyr Val Ser Leu Leu Glu Tyr Asn Asn Ile Glu Gly Met Ile Leu Leu  
50 55 60

Ser Glu Leu Ser Arg Arg Arg Ile Arg Ser Ile Asn Lys Leu Ile Arg  
65 70 75 80

Ile Gly Arg Asn Glu Cys Val Val Val Ile Arg Val Asp Lys Glu Lys  
85 90 95

Gly Tyr Ile Asp Leu Ser Lys Arg Arg Val Ser Pro Glu Glu Ala Ile  
100 105 110

Lys Cys Glu Asp Lys Phe Thr Lys Ser Lys Thr Val Tyr Ser Ile Leu  
115 120 125

Arg His Val Ala Glu Val Leu Glu Tyr Thr Lys Asp Glu Gln Leu Glu  
130 135 140

Ser Leu Phe Gln Arg Thr Ala Trp Val Phe Asp Asp Lys Xaa Lys Xaa  
145 150 155 160

Pro Gly Tyr Gly Ala Tyr Asp Ala Phe Lys His Ala Ala Xaa Xaa Pro  
165 170 175

Ser Asn Phe Gly Lys Val Xaa Ile Gly Met Lys Ile Xaa Arg Glu Arg  
180 185 190

Xaa His

<210> 1316

<211> 59

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (8)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (12)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (23)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE  
<222> (24)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (35)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (44)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (55)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (58)  
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1316  
Ala Lys Ile Ser Gln Glu Lys Xaa Phe His Lys Xaa Met Ser Ser Val  
1 5 10 15  
Lys Ala Arg Thr Gly His Xaa Xaa Phe Phe Cys Gly Gly Met Ser Ser  
20 25 30  
Val Lys Xaa Gly Gln Gly Ile Phe Thr Ser Phe Xaa Ile Leu Gln Leu  
35 40 45  
Leu Gln Ala Ile Trp Ala Xaa Thr Cys Xaa Ser  
50 55

<210> 1317  
<211> 194  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (5)  
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1317  
Gly Cys Gly Asp Xaa Arg Ala Ala Thr Thr Thr Ala Leu Ile Ser Val



1	5	10	15
Val Thr Thr Ala Ser Ala Gly Gly Glu Asp Glu Ser Ser Arg Ile Glu	20	25	30
Leu Gly Asp Val Thr Pro His Asn Ile Lys Gln Leu Lys Arg Leu Asn	35	40	45
Gln Val Ile Phe Pro Val Ser Tyr Asn Asp Lys Phe Tyr Lys Asp Val	50	55	60
Leu Glu Val Gly Glu Leu Ala Lys Leu Ala Tyr Phe Asn Asp Ile Ala	65	70	75
Val Gly Ala Val Cys Cys Arg Val Asp His Ser Gln Asn Gln Lys Arg	85	90	95
Leu Tyr Ile Met Thr Leu Gly Cys Leu Ala Pro Tyr Arg Arg Leu Gly	100	105	110
Ile Gly Thr Lys Met Leu Asn His Val Leu Asn Ile Cys Glu Lys Asp	115	120	125
Gly Thr Phe Asp Asn Ile Tyr Leu His Val Gln Ile Ser Asn Glu Ser	130	135	140
Ala Ile Asp Phe Tyr Arg Lys Phe Gly Phe Glu Ile Ile Glu Thr Lys	145	150	155
Lys Asn Tyr Tyr Lys Arg Ile Glu Pro Ala Asp Ala His Val Leu Gln	165	170	175
Lys Asn Leu Lys Val Pro Ser Gly Gln Asn Ala Asp Val Gln Lys Thr	180	185	190
Asp Asn			

&lt;210&gt; 1318

&lt;211&gt; 60

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (9)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

<221> SITE

<222> (41)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1318

Thr His Leu Phe Val Leu Leu Pro Xaa Asp Thr Phe Ser Thr Ser Cys  
1 5 10 15

Pro Ser Thr Val Arg His Ile Gln Ala Pro Arg Ser Trp Ser Pro Asn  
20 25 30

Thr Leu Lys Asn His Glu Phe Ile Xaa Met Val Ser Gln Ser Pro Asn  
35 40 45

Gln Pro Asn Gln Thr Cys Tyr Leu Val Leu Leu Gly  
50 55 60

<210> 1319

<211> 106

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (57)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (61)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1319

Ala Arg Pro Pro Ala Ala Arg Thr Gly Val Ala Gly Gly Gly Ala Pro  
1 5 10 15

Val Arg Lys Pro Gly Ile Arg Gly His Asp Gly Ala Gly Pro Arg Leu  
20 25 30

Leu Ala Ala Pro Arg Pro Pro Trp Pro Ser Ala Gly Val Gly Gln Lys  
35 40 45

His Ser Thr Leu Arg Lys Gly Thr Xaa Arg Ala Arg Xaa Cys Val Pro  
50 55 60

Gly Leu Ser Glu Gln Arg Cys Glu Asp Gln Gln Arg Glu Glu Ile Pro  
65 70 75 80

Ser Ser Arg Gly Cys His Cys Leu Pro Pro His Leu Ser Pro Ser Thr

85

90

95

Val Ile Phe Phe Ile Tyr Ile Met Thr His  
 100 105

&lt;210&gt; 1320

&lt;211&gt; 402

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (6)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1320

Gly Thr Arg Glu Pro Xaa Leu Leu Ala Glu Leu Lys Pro Gly Arg Pro  
 1 5 10 15

His Gln Phe Asp Trp Lys Ser Ser Cys Glu Thr Trp Ser Val Ala Phe  
 20 25 30

Ser Pro Asp Gly Ser Trp Phe Ala Trp Ser Gln Gly His Cys Ile Val  
 35 40 45

Lys Leu Ile Pro Trp Pro Leu Glu Glu Gln Phe Ile Pro Lys Gly Phe  
 50 55 60

Glu Ala Lys Ser Arg Ser Ser Lys Asn Glu Thr Lys Gly Arg Gly Ser  
 65 70 75 80

Pro Lys Glu Lys Thr Leu Asp Cys Gly Gln Ile Val Trp Gly Leu Ala  
 85 90 95

Phe Ser Pro Trp Pro Ser Pro Pro Ser Arg Lys Leu Trp Ala Arg His  
 100 105 110

His Pro Gln Val Pro Asp Val Ser Cys Leu Val Leu Ala Thr Gly Leu  
 115 120 125

Asn Asp Gly Gln Ile Lys Ile Trp Glu Val Gln Thr Gly Leu Leu Leu  
 130 135 140

Leu Asn Leu Ser Gly His Gln Asp Val Val Arg Asp Leu Ser Phe Thr  
 145 150 155 160

Pro Ser Gly Ser Leu Ile Leu Val Ser Ala Ser Arg Asp Lys Thr Leu  
 165 170 175

Arg Ile Trp Asp Leu Asn Lys His Gly Lys Gln Ile Gln Val Leu Ser  
 180 185 190  
 Gly His Leu Gln Trp Val Tyr Cys Cys Ser Ile Ser Pro Asp Cys Ser  
 195 200 205  
 Met Leu Cys Ser Ala Ala Gly Glu Lys Ser Val Phe Leu Trp Ser Met  
 210 215 220  
 Arg Ser Tyr Thr Leu Ile Arg Lys Leu Glu Gly His Gln Ser Ser Val  
 225 230 235 240  
 Val Ser Cys Asp Phe Ser Pro Asp Ser Ala Leu Leu Val Thr Ala Ser  
 245 250 255  
 Tyr Asp Thr Asn Val Ile Met Trp Asp Pro Tyr Thr Gly Glu Arg Leu  
 260 265 270  
 Arg Ser Leu His His Thr Gln Val Asp Pro Ala Met Asp Asp Ser Asp  
 275 280 285  
 Val His Ile Ser Ser Leu Arg Ser Val Cys Phe Ser Pro Glu Gly Leu  
 290 295 300  
 Tyr Leu Ala Thr Val Ala Asp Asp Arg Leu Leu Arg Ile Trp Ala Leu  
 305 310 315 320  
 Glu Leu Lys Thr Pro Ile Ala Phe Ala Pro Met Thr Asn Gly Leu Cys  
 325 330 335  
 Cys Thr Phe Phe Pro His Gly Gly Val Ile Ala Thr Gly Thr Arg Asp  
 340 345 350  
 Gly His Val Gln Phe Trp Thr Ala Pro Arg Val Leu Ser Ser Leu Lys  
 355 360 365  
 His Leu Cys Arg Lys Ala Leu Arg Ser Phe Leu Thr Thr Tyr Gln Val  
 370 375 380  
 Leu Ala Leu Pro Ile Pro Lys Lys Met Lys Glu Phe Leu Thr Tyr Arg  
 385 390 395 400  
 Thr Phe

&lt;210&gt; 1321

&lt;211&gt; 88

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1321

Val Trp Gln Gly Thr Leu Leu Leu Ala Ser Pro Pro Arg Arg Glu Val  
1 5 10 15

Asp Met Thr Ser Pro Pro Pro His Gln Gly Trp Glu Gln Arg Gly Cys  
20 25 30

Gly Glu Ser Gln Val Pro Leu Ala Leu Ser Arg Val Phe Ser Thr Ser  
35 40 45

His Tyr Cys Leu Leu Leu Val Ala Asn Gln Ser Ile Phe Phe Pro Cys  
50 55 60

Leu Trp Ala Val Glu Ser Ala Ala Gly Cys Thr Leu His Leu Pro Thr  
65 70 75 80

Glu Leu Gly Lys Glu Asp Asn Gln  
85

&lt;210&gt; 1322

&lt;211&gt; 284

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (232)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (237)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (250)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (262)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (265)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (269)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1322

Arg Thr Arg Gly Gly Arg Val Gly Ala Tyr Glu His Pro Gly Ser Ser  
1 5 10 15

Leu Phe Pro Glu Gly Pro Asn Asp Tyr Val Phe Ser His Leu Pro Leu  
20 25 30

His Ser Gln Gln Gln Val Arg Ala Pro Ile Pro Met Val Pro Val Gly  
35 40 45

Gly Ile Gln Met Val His Ser Met Pro Pro Ala Leu Ser Ser Leu His  
50 55 60

Pro Ser Pro Thr Leu Pro Leu Pro Met Glu Gly Phe Glu Glu Lys Lys  
65 70 75 80

Gly Ala Ser Gly Glu Ser Phe Ser Lys Asp Pro Tyr Val Leu Ser Lys  
85 90 95

Gln His Glu Lys Arg Gly Pro His Ala Leu Gln Ser Ser Gly Pro Pro  
100 105 110

Ser Thr Pro Ser Ser Pro Arg Leu Leu Met Lys Gln Ser Thr Ser Glu  
115 120 125

Asp Ser Leu Asn Ala Thr Glu Arg Glu Gln Glu Glu Asn Ile Gln Thr  
130 135 140

Cys Thr Lys Ala Ile Ala Ser Leu Arg Ile Ala Thr Glu Glu Ala Ala  
145 150 155 160

Leu Leu Gly Pro Asp Gln Pro Ala Arg Val Gln Glu Pro His Gln Asn  
165 170 175

Pro Leu Gly Ser Ala His Val Ser Ile Arg His Phe Ser Arg Pro Glu  
180 185 190

Pro Gly Gln Pro Cys Thr Ser Ala Thr His Pro Asp Leu His Asp Gly  
195 200 205

Glu Lys Asp Asn Phe Gly Thr Ser Gln Thr Pro Leu Ala His Ser Thr  
210 215 220

Phe Tyr Ser Lys Ser Cys Val Xaa Asp Lys Gln Leu Xaa Phe Ser Gln  
225 230 235 240

Gln Gln Gly Asn Phe Leu Ser Ser Thr Xaa Gly Lys Gln Arg Ser Phe  
245 250 255

Leu Gln Glu Lys Ser Xaa Ala Tyr Xaa Gly Leu Leu Xaa Gly Trp Gly  
260 265 270

Asp Phe Pro Phe Pro Thr Phe Phe Pro Phe Phe Phe  
275 280

<210> 1323

<211> 278

<212> PRT

<213> Homo sapiens

<400> 1323

Ala Leu Lys Val Leu Cys Phe Phe Phe Pro Ile Leu Thr Gln His Tyr  
1 5 10 15

Trp Cys Phe Leu Tyr Asp Phe Pro Leu Ile Leu Ser Asp Val Met Thr  
20 25 30

Glu Ala His His Lys Tyr Asp His Ser Glu Ala Thr Gly Ser Ser Ser  
35 40 45

Trp Asp Ile Gln Asn Ser Phe Arg Arg Glu Lys Leu Glu Gln Lys Ser  
50 55 60

Pro Asp Ser Lys Thr Leu Gln Glu Asp Ser Pro Gly Val Arg Gln Arg  
65 70 75 80

Val Tyr Glu Cys Gln Glu Cys Gly Lys Ser Phe Arg Gln Lys Gly Ser  
85 90 95

Leu Thr Leu His Glu Arg Ile His Thr Gly Gln Lys Pro Phe Glu Cys  
100 105 110

Thr His Cys Gly Lys Ser Phe Arg Ala Lys Gly Asn Leu Val Thr His  
115 120 125

Gln Arg Ile His Thr Gly Glu Lys Pro Tyr Gln Cys Lys Glu Cys Gly  
130 135 140

Lys Ser Phe Ser Gln Arg Gly Ser Leu Ala Val His Glu Arg Leu His  
145 150 155 160

Thr Gly Gln Lys Pro Tyr Glu Cys Ala Ile Cys Gln Arg Ser Phe Arg  
165 170 175

Asn Gln Ser Asn Leu Ala Val His Arg Arg Val His Ser Gly Glu Lys  
 180 185 190

Pro Tyr Arg Cys Asp Gln Cys Gly Lys Ala Phe Ser Gln Lys Gly Ser  
 195 200 205

Leu Ile Val His Ile Arg Val His Thr Gly Leu Lys Pro Tyr Ala Cys  
 210 215 220

Thr Gln Cys Arg Lys Ser Phe His Thr Arg Gly Asn Cys Ile Leu His  
 225 230 235 240

Gly Lys Ile His Thr Gly Glu Thr Pro Tyr Leu Cys Gly Gln Cys Gly  
 245 250 255

Lys Ser Phe Thr Gln Arg Gly Ser Leu Ala Val His Gln Arg Ser Cys  
 260 265 270

Ser Gln Arg Leu Thr Leu  
 275

<210> 1324

<211> 248

<212> PRT

<213> Homo sapiens

<400> 1324

Gly Thr Ser Trp Ser Arg Pro Phe Arg Gln Cys Phe Gln Thr Pro Trp  
 1 5 10 15

Glu Arg Gly Cys Arg Val Arg Ser Ser Val Cys Thr Ala Arg Gly Arg  
 20 25 30

Ala Gln Gln Arg Met Ser Gly Thr Leu Glu Lys Val Leu Cys Leu Arg  
 35 40 45

Asn Asn Thr Ile Phe Lys Gln Ala Phe Ser Leu Leu Arg Phe Arg Thr  
 50 55 60

Ser Gly Glu Lys Pro Ile Tyr Ser Val Gly Gly Ile Leu Leu Ser Ile  
 65 70 75 80

Ser Arg Pro Tyr Lys Thr Lys Pro Thr His Gly Ile Gly Lys Tyr Lys  
 85 90 95

His Leu Ile Lys Ala Glu Glu Pro Lys Lys Lys Lys Gly Lys Val Glu  
 100 105 110

Val Arg Ala Ile Asn Leu Gly Thr Asp Tyr Glu Tyr Gly Val Leu Asn



115	120	125
Ile His Leu Thr Ala Tyr Asp Met Thr Leu Ala Glu Ser Tyr Ala Gln		
130	135	140
Tyr Val His Asn Leu Cys Asn Ser Leu Ser Ile Lys Val Glu Glu Ser		
145	150	155 160
Tyr Ala Met Pro Thr Lys Thr Ile Glu Val Leu Gln Leu Gln Asp Gln		
	165	170 175
Gly Ser Lys Met Leu Leu Asp Ser Val Leu Thr Thr His Glu Arg Val		
	180	185 190
Val Gln Ile Ser Gly Leu Ser Ala Thr Phe Ala Glu Ile Phe Leu Glu		
	195	200 205
Ile Ile Gln Ser Ser Leu Pro Glu Gly Val Arg Leu Ser Val Lys Glu		
	210	215 220
His Thr Glu Glu Asp Phe Lys Gly Arg Phe Lys Ala Arg Pro Glu Leu		
225	230	235 240
Glu Glu Leu Leu Ala Lys Leu Lys		
	245	

<210> 1325  
 <211> 139  
 <212> PRT  
 <213> Homo sapiens

<400> 1325

Pro Gly Ser Thr His Ala Ser Ala His Ala Ser Ala Arg Pro Thr Arg		
1	5	10 15
Lys Met Ala Pro Gln Lys Asp Arg Lys Pro Lys Arg Ser Thr Trp Arg		
	20	25 30
Phe Asn Leu Asp Leu Thr His Pro Val Glu Asp Gly Ile Phe Asp Ser		
	35	40 45
Gly Asn Phe Glu Gln Phe Leu Arg Glu Lys Val Lys Val Asn Gly Lys		
	50	55 60
Thr Gly Asn Leu Gly Asn Val Val His Ile Glu Arg Phe Lys Asn Lys		
65	70	75 80
Ile Thr Val Val Ser Glu Lys Gln Phe Ser Lys Arg Tyr Leu Lys Tyr		
	85	90 95

Leu Thr Lys Lys Tyr Leu Lys Lys Asn Asn Leu Arg Asp Trp Leu Arg  
 100 105 110

Val Val Ala Ser Asp Lys Glu Thr Tyr Glu Leu Arg Tyr Phe Gln Ile  
 115 120 125

Ser Gln Asp Glu Asp Glu Ser Glu Ser Glu Asp  
 130 135

<210> 1326

<211> 356

<212> PRT

<213> Homo sapiens

<400> 1326

Ile Pro Thr Arg Pro Arg Thr Arg Gly Ser Leu Gly Ser Ala Val Lys  
 1 5 10 15

Leu Arg Thr Phe Ala Glu Asn Tyr Pro Ile Pro Glu Pro Gly Pro Asn  
 20 25 30

Glu Val Leu Leu Arg Met His Ser Val Gly Ile Cys Gly Ser Asp Val  
 35 40 45

His Tyr Trp Glu Tyr Gly Arg Ile Gly Asn Phe Ile Val Lys Lys Pro  
 50 55 60

Met Val Leu Gly His Glu Ala Ser Gly Thr Val Glu Lys Val Gly Ser  
 65 70 75 80

Ser Val Lys His Leu Lys Pro Gly Asp Arg Val Ala Ile Glu Pro Gly  
 85 90 95

Ala Pro Arg Glu Asn Asp Glu Phe Cys Lys Met Gly Arg Tyr Asn Leu  
 100 105 110

Ser Pro Ser Ile Phe Phe Cys Ala Thr Pro Pro Asp Asp Gly Asn Leu  
 115 120 125

Cys Arg Phe Tyr Lys His Asn Ala Ala Phe Cys Tyr Lys Leu Pro Asp  
 130 135 140

Asn Val Thr Phe Glu Glu Gly Ala Leu Ile Glu Pro Leu Ser Val Gly  
 145 150 155 160

Ile His Ala Cys Arg Arg Gly Gly Val Thr Leu Gly His Lys Val Leu  
 165 170 175

Val Cys Gly Ala Gly Pro Ile Gly Met Val Thr Leu Leu Val Ala Lys  
180 185 190

Ala Met Gly Ala Ala Gln Val Val Val Thr Asp Leu Ser Ala Thr Arg  
195 200 205

Leu Ser Lys Ala Lys Glu Ile Gly Ala Asp Leu Val Leu Gln Ile Ser  
210 215 220

Lys Glu Ser Pro Gln Glu Ile Ala Arg Lys Val Glu Gly Gln Leu Gly  
225 230 235 240

Cys Lys Pro Glu Val Thr Ile Glu Cys Thr Gly Ala Glu Ala Ser Ile  
245 250 255

Gln Ala Gly Ile Tyr Ala Thr Arg Ser Gly Gly Thr Leu Val Leu Val  
260 265 270

Gly Leu Gly Ser Glu Met Thr Thr Val Pro Leu Leu His Ala Ala Ile  
275 280 285

Arg Glu Val Asp Ile Lys Gly Val Phe Arg Tyr Cys Asn Thr Trp Pro  
290 295 300

Val Ala Ile Ser Met Leu Ala Ser Lys Ser Val Asn Val Lys Pro Leu  
305 310 315 320

Val Thr His Arg Phe Pro Leu Glu Lys Ala Leu Glu Ala Phe Glu Thr  
325 330 335

Phe Lys Lys Gly Leu Gly Leu Lys Ile Met Leu Lys Cys Asp Pro Ser  
340 345 350

Asp Gln Asn Pro  
355

&lt;210&gt; 1327

&lt;211&gt; 107

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1327

Met Asp Ala Ile Leu Asn Tyr Arg Ser Glu Asp Thr Glu Asp Tyr Tyr  
1 5 10 15

Thr Leu Leu Gly Cys Asp Glu Leu Ser Ser Val Glu Gln Ile Leu Ala  
20 25 30

Glu Phe Lys Val Arg Ala Leu Glu Cys His Pro Asp Lys His Pro Glu

35                                      40                                      45  
 Asn Pro Lys Ala Val Glu Thr Phe Gln Lys Leu Gln Lys Ala Lys Glu  
     50                                      55                                      60  
 Ile Leu Thr Asn Glu Glu Ser Arg Ala Arg Tyr Asp His Trp Arg Arg  
     65                                      70                                      75                                      80  
 Ser Gln Met Ser Met Pro Phe Gln Gln Trp Glu Ala Leu Asn Asp Ser  
                                     85                                      90                                      95  
 Val Lys Thr Val Gly Phe Ser Leu Gly Ala Thr  
                                     100                                      105

<210> 1328

<211> 110

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (1)

<223> xaa equals any of the naturally occurring L-amino acids

<400> 1328

Xaa Val Ser Leu Ala Ala Leu Lys Lys Ala Leu Ala Ala Ala Gly Tyr  
     1                                      5                                      10                                      15  
 Asp Val Glu Lys Asn Asn Ser Arg Ile Lys Leu Gly Leu Lys Ser Leu  
                                     20                                      25                                      30  
 Val Ser Lys Gly Thr Leu Val Gln Thr Lys Gly Thr Gly Ala Ser Gly  
                                     35                                      40                                      45  
 Ser Phe Lys Leu Asn Lys Lys Ala Ala Ser Gly Glu Ala Lys Pro Lys  
                                     50                                      55                                      60  
 Val Lys Lys Ala Gly Gly Thr Lys Pro Lys Lys Pro Val Gly Ala Ala  
     65                                      70                                      75                                      80  
 Lys Lys Pro Lys Lys Ala Ala Gly Gly Ala Thr Pro Lys Lys Ser Ala  
                                     85                                      90                                      95  
 Lys Lys Thr Pro Lys Lys Ala Lys Lys Pro Pro Arg Pro Leu  
                                     100                                      105                                      110

<210> 1329

<211> 292  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (20)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (145)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (207)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 1329

Leu	Gly	Leu	Ile	Cys	Gln	Ala	Leu	Trp	Phe	Pro	Ser	Tyr	Phe	Arg	Gly	1	5	10	15
Cys	Tyr	Gly	Xaa	Leu	Gly	Gly	Arg	Pro	His	Met	Gly	Arg	Gly	Trp	Val	20	25	30	
Val	Asp	Gly	Val	Ser	Val	Val	Ser	Cys	Gly	Arg	Val	Ile	Leu	Leu	Leu	35	40	45	
Phe	Leu	Phe	Thr	Phe	Phe	Pro	Leu	His	Lys	Pro	Lys	Ser	Phe	His	Leu	50	55	60	
Val	Ser	Thr	Val	Trp	Thr	Val	Leu	Glu	Leu	Gly	Ala	Cys	Gln	Lys	Asn	65	70	75	80
Leu	Gly	Leu	Gly	Lys	Pro	Gln	Val	Ala	Asp	Met	Val	Lys	Gln	Arg	Asn	85	90	95	
Cys	Ser	Ser	Gly	Ser	Cys	Thr	Thr	Ser	Glu	Gly	Gln	Lys	Pro	Ser	Pro	100	105	110	
Gly	Arg	Arg	Arg	Val	Phe	Arg	Ser	Gln	Thr	Phe	Gly	Glu	Lys	Ala	Ala	115	120	125	
Pro	Ser	Leu	Leu	Gly	Asp	Arg	His	Ser	Ala	Cys	Val	Pro	Gln	Leu	Gly	130	135	140	
Xaa	Ala	Gly	Ser	Leu	Thr	Tyr	Glu	Ala	Trp	Arg	Ser	Ser	His	Cys	Pro	145	150	155	160
His	Tyr	Gly	Gln	Arg	Gly	Asp	Pro	Ala	Gly	Pro	Leu	Gly	Gln	Thr	Gly				



Pro Glu Glu Asp Glu Arg Lys Lys Arg Arg Arg Glu Arg Asn Lys Ile  
100 105 110

Ala Ala Ala Lys Cys Arg Asn Lys Lys Lys Glu Lys Thr Asp Ala Cys  
115 120 125

Arg Lys  
130

<210> 1331

<211> 232

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (168)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (186)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (187)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (199)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (202)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (209)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1331

Gly Lys Leu Val Arg Leu Gln Val Pro Val Arg Asn Ser Arg Val Asp  
1 5 10 15

Pro Arg Val Arg Ala Glu Asn Arg Ser Trp Lys Cys Leu Leu Ala Ala  
20 25 30

Arg Gly Glu Glu Arg Gly Ala Ser Ile Met Ala Glu Gln Asp Val Glu  
35 40 45

Asn Asp Leu Leu Asp Tyr Asp Glu Glu Glu Glu Pro Gln Ala Pro Gln  
50 55 60

Glu Ser Thr Pro Ala Pro Pro Lys Lys Asp Ile Lys Gly Ser Tyr Val  
65 70 75 80

Ser Ile His Ser Ser Gly Phe Arg Asp Phe Leu Leu Lys Pro Glu Leu  
85 90 95

Leu Arg Ala Ile Val Asp Cys Gly Phe Glu His Pro Ser Glu Val Gln  
100 105 110

His Glu Cys Ile Pro Gln Ala Ile Leu Gly Met Asp Val Leu Cys Gln  
115 120 125

Ala Lys Ser Gly Met Gly Lys Thr Ala Val Phe Val Leu Ala Thr Leu  
130 135 140

Gln Gln Ile Glu Pro Val Asn Gly Gln Val Thr Val Leu Val Met Cys  
145 150 155 160

His Thr Arg Glu Leu Ala Phe Xaa Ile Ser Lys Glu Tyr Glu Arg Phe  
165 170 175

Ser Lys Tyr Met Pro Ser Val Lys Val Xaa Xaa Ser Ala Arg Leu Asp  
180 185 190

Gln Ala Pro Leu Gly Phe Xaa Ser Phe Xaa Ser Leu Gly Ser Gly Pro  
195 200 205

Xaa Ser Ile Tyr Gln Ala Trp Gln Gly Gln Leu Pro Leu Lys Val Cys  
210 215 220

Ser Gly Phe Cys Ser Leu Lys Ala  
225 230

&lt;210&gt; 1332

&lt;211&gt; 63

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE



<222> (7)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1332

Gly His Gly Glu Gln Arg Xaa His Gly Arg Glu Val Asn Ala Leu Lys  
1 5 10 15

Ser Lys Leu Arg Arg Gly Asn Glu Thr Ser Phe Val Pro Ser Arg Arg  
20 25 30

Ser Gly Gly Arg Arg Val Ile Glu Asn Ala Asp Gly Ser Glu Glu Glu  
35 40 45

Thr Asp Thr Arg Asp Ala Asp Phe Asn Gly Thr Lys Ala Ser Glu  
50 55 60

<210> 1333

<211> 175

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (59)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1333

Ala Ile Ser Val Leu Ala Ser Pro Leu Thr Ser Leu Leu Ser Cys Gly  
1 5 10 15

Asp Arg Met Asp Arg Phe Leu Val Lys Gly Ala Gln Gly Gly Leu Leu  
20 25 30

Arg Lys Gln Glu Glu Gln Glu Pro Thr Gly Glu Glu Pro Ala Val Leu  
35 40 45

Gly Gly Asp Lys Glu Ser Thr Arg Lys Arg Xaa Arg Arg Glu Ala Pro  
50 55 60

Gly Asn Gly Gly His Ser Ala Gly Pro Ser Trp Arg His Ile Arg Ala  
65 70 75 80

Glu Gly Leu Asp Cys Ser Tyr Thr Val Leu Phe Gly Lys Ala Glu Ala  
85 90 95

Asp Glu Ile Phe Gln Glu Leu Glu Lys Glu Val Glu Tyr Phe Thr Gly  
100 105 110

Ile Lys Met Ala Val Thr Thr Ser Gly Ser Thr Glu Met Met Lys Glu

115 120 125  
Asn Trp Pro Leu Gly Ala Pro Leu Pro Leu Ser Pro Ser Val Pro Ala  
130 135 140  
Glu Thr Leu Ser Ser Gly Ile Arg Ile Pro Val Gly Lys Ala Pro Pro  
145 150 155 160  
Gly Gly Trp Arg Trp Ser Gly Cys Arg Trp Pro Thr Gly Ala Tyr  
165 170 175

<210> 1334  
<211> 63  
<212> PRT  
<213> Homo sapiens

<400> 1334  
Ser Ser Phe Leu Leu Val Gln Phe Asp Gly Val Asn Gly Glu Phe Gln  
1 5 10 15  
Ala Gln Leu Leu Asn Phe Val Ala Ser Ser Ser Ser Pro Ser His Leu  
20 25 30  
Gln Ser Ser Ala Pro Leu Cys Leu Gly Asp Arg Gln Glu Val Gly Glu  
35 40 45  
Glu Leu Asn Leu Phe Ile Phe Pro Gly Arg Asp Ile Phe Lys Ala  
50 55 60

<210> 1335  
<211> 95  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (50)  
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1335  
Leu Leu Leu Phe Leu Ile Met Phe Ser Ala Glu Arg His Gly Leu Lys  
1 5 10 15  
Glu Pro Lys Arg Val Glu Glu Leu Gln Asn Lys Ile Val Asn Cys Leu  
20 25 30  
Lys Asp His Val Thr Phe Asn Asn Gly Gly Leu Asn Arg Pro Asn Tyr

35 40 45  
Leu Xaa Lys Leu Leu Gly Lys Leu Pro Glu Leu Arg Thr Leu Cys Thr  
50 55 60  
Gln Gly Leu Gln Arg Ile Phe Tyr Leu Lys Leu Glu Asp Leu Val Pro  
65 70 75 80  
Pro Pro Ala Ile Ile Asp Lys Leu Phe Leu Asp Thr Leu Pro Phe  
85 90 95

<210> 1336  
<211> 84  
<212> PRT  
<213> Homo sapiens

<400> 1336  
Asp Arg Arg Arg Lys Trp Arg Gly Gly Gly Ile Leu Glu Leu Leu Arg  
1 5 10 15  
Met Gly Gly Val Pro Ser Ala Glu Ala Lys Gly Gly Glu Gln Pro Ser  
20 25 30  
Trp Ser Trp Arg Asp Gly Glu Gly Phe Gln Leu Ile Cys Arg Ser Cys  
35 40 45  
Pro Cys Gly Pro Gln Pro Ser Gly Leu Ala Val Asp Val Pro Leu Pro  
50 55 60  
Thr His Leu Pro Ala Cys Pro Pro Ala Arg Ile Ala Leu Ala Asp Leu  
65 70 75 80  
Pro Glu Arg Thr

<210> 1337  
<211> 146  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (75)  
<223> Xaa equals any of the naturally occurring L-amino acids  
  
<400> 1337  
Ala Gly Leu Arg Lys Arg Gly Arg Ser Gly Ser Ala Ala Gln Ala Glu

1 5 10 15  
Gly Leu Cys Lys Gln Trp Leu Gln Arg Ala Trp Gln Glu Arg Arg Leu  
20 25 30  
Leu Leu Arg Glu Pro Arg Tyr Thr Leu Leu Val Ala Ala Cys Leu Cys  
35 40 45  
Leu Ala Glu Val Gly Ile Thr Phe Trp Val Ile His Arg Val Ala Tyr  
50 55 60  
Thr Glu Ile Asp Trp Lys Ala Tyr Met Ala Xaa Val Glu Gly Val Ile  
65 70 75 80  
Asn Gly Thr Tyr Asp Tyr Thr Gln Leu Gln Gly Asp Thr Gly Pro Leu  
85 90 95  
Val Tyr Pro Ala Gly Phe Val Tyr Ile Phe Met Gly Leu Tyr Tyr Ala  
100 105 110  
Thr Ser Arg Gly Thr Asp Ile Arg Met Ala Gln Asn Ile Phe Ala Val  
115 120 125  
Leu Tyr Leu Ala Thr Leu Leu Leu Val Phe Leu Ile Tyr His Gln Thr  
130 135 140  
Cys Lys  
145

<210> 1338  
<211> 187  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (177)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (185)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (187)  
<223> Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1338

Leu Thr Leu Leu Phe Pro Glu Pro Pro Ala Gln Ala Gly Met Phe Val  
1 5 10 15

Leu Val Glu Met Val Asp Thr Val Arg Ile Pro Pro Trp Gln Phe Glu  
20 25 30

Arg Lys Leu Asn Asp Ser Ile Ala Glu Glu Leu Asn Lys Lys Leu Ala  
35 40 45

Asn Lys Val Val Tyr Asn Val Gly Leu Cys Ile Cys Leu Phe Asp Ile  
50 55 60

Thr Lys Leu Glu Asp Ala Tyr Val Phe Pro Gly Asp Gly Ala Ser His  
65 70 75 80

Thr Lys Val His Phe Arg Cys Val Val Phe His Pro Phe Leu Asp Glu  
85 90 95

Ile Leu Ile Gly Lys Ile Lys Gly Cys Ser Pro Glu Gly Val His Val  
100 105 110

Ser Leu Gly Phe Phe Asp Asp Ile Leu Ile Pro Pro Glu Ser Leu Gln  
115 120 125

Gln Pro Ala Lys Phe Asp Glu Ala Glu Gln Val Trp Val Trp Glu Tyr  
130 135 140

Glu Thr Glu Glu Gly Ala His Asp Leu Tyr Met Asp Thr Gly Glu Glu  
145 150 155 160

Ile Arg Phe Arg Val Val Asp Glu Ser Phe Val Asp Thr Ser Pro Thr  
165 170 175

Xaa Pro Ser Ser Ala Asp Ala Thr Xaa Phe Xaa  
180 185

&lt;210&gt; 1339

&lt;211&gt; 43

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (29)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1339

Gly Gln Thr Phe Thr Ser Gly Asn Leu Leu Ser His Val Phe His Phe

1                      5                      10                      15  
 Tyr Ala His Arg Ile Ile Trp Cys Asn Gly Ala Tyr Xaa Pro Lys Phe  
                     20                      25                      30  
 Gln Asn Phe Lys Phe Met Tyr Leu Phe Leu His  
                     35                      40

<210> 1340

<211> 104

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (1)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (31)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (100)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1340

Xaa Pro Ala Pro Gln Gln Pro Gly Pro Gln Arg Cys Glu Glu Pro Leu  
 1                      5                      10                      15  
 His Arg Asp Leu Pro Gly Gly Ala Asp Gln Ser Gly Arg Arg Xaa Ser  
                     20                      25                      30  
 Leu Arg Gln Thr Arg Thr Trp Lys Phe Ile Asp Pro Phe Cys Arg Ile  
                     35                      40                      45  
 Ala Ala Arg Thr Lys Asp Ser Leu Val Leu Asn Asn Ile Thr Arg Gly  
                     50                      55                      60  
 Ile Phe Glu Thr Ile Val Glu Gln Ala Pro Leu Ala Ile Glu Asp Leu  
 65                      70                      75                      80  
 Leu Asn Glu Leu Asp Thr Gln Asp Glu Glu Val Ala Ser Asp Ser Asp  
                     85                      90                      95  
 Glu Ser Ser Xaa Gly Gly Glu Arg  
                     100

<210> 1341  
<211> 169  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (126)  
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1341  
Gly Ser Thr Pro Arg Gly Lys Met Arg Ala Pro Ile Pro Glu Pro Lys  
1 5 10 15  
Pro Gly Asp Leu Ile Glu Ile Phe Arg Pro Phe Tyr Arg His Trp Ala  
20 25 30  
Ile Tyr Val Gly Asp Gly Tyr Val Val His Leu Ala Pro Pro Ser Glu  
35 40 45  
Val Ala Gly Ala Gly Ala Ala Ser Val Met Ser Ala Leu Thr Asp Lys  
50 55 60  
Ala Ile Val Lys Lys Glu Leu Leu Tyr Asp Val Ala Gly Ser Asp Lys  
65 70 75 80  
Tyr Gln Val Asn Asn Lys His Asp Asp Lys Tyr Ser Pro Leu Pro Cys  
85 90 95  
Ser Lys Ile Ile Gln Arg Ala Glu Glu Leu Val Gly Gln Glu Val Leu  
100 105 110  
Tyr Lys Leu Thr Ser Glu Asn Cys Glu His Phe Val Asn Xaa Leu Arg  
115 120 125  
Tyr Gly Val Ala Arg Ser Asp Gln Val Arg Asp Val Ile Ile Ala Ala  
130 135 140  
Ser Val Ala Gly Met Gly Leu Ala Ala Met Ser Leu Ile Gly Val Met  
145 150 155 160  
Phe Ser Arg Asn Lys Arg Gln Lys Gln  
165

<210> 1342  
<211> 115

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (5)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (6)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (25)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (49)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (102)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (114)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1342

Phe	Pro	Asn	Pro	Xaa	Xaa	Arg	Gly	Val	Trp	Ala	Arg	Gly	Pro	Pro	Gly
1				5					10					15	

Leu	Ser	Phe	Lys	Gly	Lys	Thr	Leu	Xaa	Gly	Phe	Gly	Glu	Ile	Pro	Pro
			20					25					30		

Pro	Pro	Gly	Gly	Ala	Leu	Cys	Pro	Lys	Gly	Lys	Asn	Phe	Pro	Gly	Ala
		35					40					45			

Xaa	Pro	Glu	Arg	Pro	Gln	Lys	Arg	Phe	Pro	Pro	Gly	Lys	Glu	Ser	Pro
		50				55					60				

Val	Gly	Ile	Val	Lys	Thr	Lys	Arg	Gly	Ile	Leu	Lys	Ala	Gly	Asn	Ser
65					70					75				80	

Gly	Cys	Pro	Pro	Thr	Ser	Pro	Asn	Ile	Pro	Gly	Gly	Thr	Trp	Gly	Leu
				85					90					95	



Glu Arg Cys Leu Gly Xaa Leu Arg Gln Ala Ser Gln Gly Trp Leu Val  
                   100                                  105                                  110

Ser Xaa Arg  
                   115

<210> 1343

<211> 342

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (1)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (24)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1343

Xaa Leu His Arg Gly Asp Asp Arg Ser Arg Thr Ser Gly Ser Pro Gly  
   1                  5                                  10                                  15

Leu Gln Glu Phe Gly Arg Gly Xaa Ala Gly Val Gly Gly Arg Pro Arg  
                   20                                  25                                  30

Arg Arg Arg Arg Lys Gly Ala Ala Ser Arg Ala Arg Leu Pro Phe Ser  
                   35                                  40                                  45

Leu Ser Ile Met Asp Pro Ser Leu Leu Arg Glu Arg Glu Leu Phe Lys  
                   50                                  55                                  60

Lys Arg Ala Leu Ser Thr Pro Val Val Glu Lys Arg Ser Ala Ser Ser  
                   65                                  70                                  75                                  80

Glu Ser Ser Ser Ser Ser Ser Lys Lys Lys Lys Thr Lys Val Glu His  
                                   85                                  90                                  95

Gly Gly Ser Ser Gly Ser Lys Gln Asn Ser Asp His Ser Asn Gly Ser  
                   100                                  105                                  110

Phe Asn Leu Lys Ala Leu Ser Gly Ser Ser Gly Tyr Lys Phe Gly Val  
                   115                                  120                                  125

Leu Ala Lys Ile Val Asn Tyr Met Lys Thr Arg His Gln Arg Gly Asp  
                   130                                  135                                  140

Thr His Pro Leu Thr Leu Asp Glu Ile Leu Asp Glu Thr Gln His Leu  
 145 150 155 160

Asp Ile Gly Leu Lys Gln Lys Gln Trp Leu Met Thr Glu Ala Leu Val  
 165 170 175

Asn Asn Pro Lys Ile Glu Val Ile Asp Gly Lys Tyr Ala Phe Lys Pro  
 180 185 190

Lys Tyr Asn Val Arg Asp Lys Lys Ala Leu Leu Arg Leu Leu Asp Gln  
 195 200 205

His Asp Gln Arg Gly Leu Gly Gly Ile Leu Leu Glu Asp Ile Glu Glu  
 210 215 220

Ala Leu Pro Asn Ser Gln Lys Ala Val Lys Ala Leu Gly Asp Gln Ile  
 225 230 235 240

Leu Phe Val Asn Arg Pro Asp Lys Lys Lys Ile Leu Phe Phe Asn Asp  
 245 250 255

Lys Ser Cys Gln Phe Ser Val Asp Glu Glu Phe Gln Lys Leu Trp Arg  
 260 265 270

Ser Val Thr Val Asp Ser Met Asp Glu Glu Lys Ile Glu Glu Tyr Leu  
 275 280 285

Lys Arg Gln Gly Ile Ser Ser Met Gln Glu Ser Gly Pro Lys Lys Val  
 290 295 300

Ala Pro Ile Gln Arg Arg Lys Lys Pro Ala Ser Gln Lys Lys Arg Arg  
 305 310 315 320

Phe Lys Thr His Asn Glu His Leu Ala Gly Val Leu Lys Asp Tyr Ser  
 325 330 335

Asp Ile Thr Ser Ser Lys  
 340

<210> 1344

<211> 310

<212> PRT

<213> Homo sapiens

<400> 1344

Cys Gly Arg Arg Ser Ser Leu His Leu Leu Leu Gly Pro Pro Ser Leu  
 1 5 10 15

Pro Ser Ser His Phe Pro Ser Ser Gly Val Val Pro Ala Thr Leu Asp  
                   20                  25                  30

Ala Ala Ala Gly Thr Lys Glu Asp Pro Ala Ala Ala Arg Arg His Leu  
           35                  40                  45

Arg Leu Leu Leu Arg Pro Ala Pro Gly Pro Arg Arg Arg His Gln Gly  
       50                  55                  60

Ala Arg Leu Ser Leu Pro Gly Gly Leu Gly Pro Ala Ser Ser Cys Arg  
   65                  70                  75                  80

Leu Arg Ala Arg Thr Arg Leu Ser His Leu Gly Pro Cys Arg Gln Lys  
                   85                  90                  95

Asn Met Ala Gln Glu Thr Asn Gln Thr Pro Gly Pro Met Leu Cys Ser  
           100                  105                  110

Thr Gly Cys Gly Phe Tyr Gly Asn Pro Arg Thr Asn Gly Met Cys Ser  
       115                  120                  125

Val Cys Tyr Lys Glu His Leu Gln Arg Gln Gln Asn Ser Gly Arg Met  
       130                  135                  140

Ser Pro Met Gly Thr Ala Ser Gly Ser Asn Ser Pro Thr Ser Asp Ser  
   145                  150                  155                  160

Ala Ser Val Gln Arg Ala Asp Thr Ser Leu Asn Asn Cys Glu Gly Ala  
                   165                  170                  175

Ala Gly Ser Thr Ser Glu Lys Ser Arg Asn Val Pro Val Ala Ala Leu  
       180                  185                  190

Pro Val Thr Gln Gln Met Thr Glu Met Ser Ile Ser Arg Glu Asp Lys  
       195                  200                  205

Ile Thr Thr Pro Lys Thr Glu Val Ser Glu Pro Val Val Thr Gln Pro  
       210                  215                  220

Ser Pro Ser Val Ser Gln Pro Ser Thr Ser Gln Ser Glu Glu Lys Ala  
   225                  230                  235                  240

Pro Glu Leu Pro Lys Pro Lys Lys Asn Arg Cys Phe Met Cys Arg Lys  
           245                  250                  255

Lys Val Gly Leu Thr Gly Phe Asp Cys Arg Cys Gly Asn Leu Phe Cys  
       260                  265                  270

Gly Leu His Arg Tyr Ser Asp Lys His Asn Cys Pro Tyr Asp Tyr Lys  
       275                  280                  285

Ala Glu Ala Ala Ala Lys Ile Arg Lys Glu Asn Pro Val Val Val Ala  
 290 295 300

Glu Lys Ile Gln Arg Ile  
 305 310

<210> 1345

<211> 202

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (9)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (182)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1345

Arg Arg Ala Arg Ala His Pro Gly Xaa Arg Leu Trp Gly Arg Arg Arg  
 1 5 10 15

Gly Pro Glu Pro Ser Thr Val Gly Arg Lys Ala Thr Lys Lys Thr Asp  
 20 25 30

Lys Pro Arg Gln Glu Asp Lys Asp Asp Leu Asp Val Thr Glu Leu Thr  
 35 40 45

Asn Glu Asp Leu Leu Asp Gln Leu Val Lys Tyr Gly Val Asn Pro Gly  
 50 55 60

Pro Ile Val Gly Thr Thr Arg Lys Leu Tyr Glu Lys Lys Leu Leu Lys  
 65 70 75 80

Leu Arg Glu Gln Gly Thr Glu Ser Arg Ser Ser Thr Pro Leu Pro Thr  
 85 90 95

Ile Ser Ser Ser Ala Glu Asn Thr Arg Gln Asn Gly Ser Asn Asp Ser  
 100 105 110

Asp Arg Tyr Ser Asp Asn Glu Glu Gly Lys Lys Lys Glu His Lys Lys  
 115 120 125

Val Lys Ser Thr Arg Asp Ile Val Pro Phe Ser Glu Leu Gly Asn Tyr  
 130 135 140

Ser Leu Trp Trp Trp Asp Phe Phe Arg Val Phe Leu Phe Leu Lys Ser  
 145 150 155 160

Pro Pro Val Leu Leu Trp Ala Val Pro Asn Tyr Arg Gln Leu Arg Lys  
 165 170 175

Tyr Ile Leu Leu Arg Xaa Thr Tyr Leu Gly Ser Leu Leu Leu Pro Gln  
 180 185 190

Thr Cys Leu Ala Gly Asp Ser Cys Arg Ser  
 195 200

<210> 1346

<211> 223

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (35)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (137)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1346

Val Ile Asp His Pro Arg Pro Arg Asp Thr Gln Phe Ile Val Ile Ile  
 1 5 10 15

Met Asn Asn Gln Lys Val Val Ala Val Leu Leu Gln Glu Cys Lys Gln  
 20 25 30

Val Leu Xaa Gln Leu Leu Leu Glu Ala Pro Asp Val Ser Glu Glu Asp  
 35 40 45

Lys Ser Glu Asp Gln Arg Cys Arg Ala Leu Leu Pro Ser Glu Leu Arg  
 50 55 60

Thr Leu Ile Gln Glu Ala Lys Glu Met Lys Trp Pro Phe Val Pro Glu  
 65 70 75 80

Lys Trp Gln Tyr Lys Gln Ala Val Gly Pro Glu Asp Lys Thr Asn Leu  
 85 90 95

Lys Asp Val Ile Gly Ala Gly Leu Gln Gln Leu Leu Ala Ser Leu Arg  
 100 105 110

Ala Ser Ile Leu Ala Arg Asp Cys Ala Ala Ala Ala Ile Val Phe  
 115 120 125

Leu Val Asp Arg Phe Leu Tyr Gly Xaa Asp Val Ser Gly Lys Leu Leu  
 130 135 140

Gln Val Ala Lys Gly Leu His Lys Leu Gln Pro Ala Thr Pro Ile Ala  
 145 150 155 160

Pro Gln Val Val Ile Arg Gln Ala Arg Ile Ser Val Asn Ser Gly Lys  
 165 170 175

Leu Leu Lys Ala Glu Tyr Ile Leu Ser Ser Leu Ile Ser Asn Asn Gly  
 180 185 190

Ala Thr Gly Thr Trp Leu Tyr Arg Asn Glu Ser Asp Lys Val Leu Val  
 195 200 205

Gln Ser Val Cys Ile Gln Ile Arg Gly Gln Ile Leu Gln Lys Leu  
 210 215 220

<210> 1347

<211> 744

<212> PRT

<213> Homo sapiens

<400> 1347

Leu Asp Arg Thr Ile Lys Val Trp Gln Leu Gly Ser Ser Ser Pro Asn  
 1 5 10 15

Phe Thr Leu Glu Gly His Glu Lys Gly Val Asn Cys Ile Asp Tyr Tyr  
 20 25 30

Ser Gly Gly Asp Lys Pro Tyr Leu Ile Ser Gly Ala Asp Asp Arg Leu  
 35 40 45

Val Lys Ile Trp Asp Tyr Gln Asn Lys Thr Cys Val Gln Thr Leu Glu  
 50 55 60

Gly His Ala Gln Asn Val Ser Cys Ala Ser Phe His Pro Glu Leu Pro  
 65 70 75 80

Ile Ile Ile Thr Gly Ser Glu Asp Gly Thr Val Arg Ile Trp His Ser  
 85 90 95

Ser Thr Tyr Arg Leu Glu Ser Thr Leu Asn Tyr Gly Met Glu Arg Val  
 100 105 110

Trp Cys Val Ala Ser Leu Arg Gly Ser Asn Asn Val Ala Leu Gly Tyr

115	120	125
Asp Glu Gly Ser Ile Ile Val Lys Leu Gly Arg Glu Glu Pro Ala Met		
130	135	140
Ser Met Asp Ala Asn Gly Lys Ile Ile Trp Ala Lys His Ser Glu Val		
145	150	155
Gln Gln Ala Asn Leu Lys Ala Met Gly Asp Ala Glu Ile Lys Asp Gly		
	165	170
Glu Arg Leu Pro Leu Ala Val Lys Asp Met Gly Ser Cys Glu Ile Tyr		
	180	185
Pro Gln Thr Ile Gln His Asn Pro Asn Gly Arg Phe Val Val Val Cys		
	195	200
Gly Asp Gly Glu Tyr Ile Ile Tyr Thr Ala Met Ala Leu Arg Asn Lys		
	210	215
Ser Phe Gly Ser Ala Gln Glu Phe Ala Trp Ala His Asp Ser Ser Glu		
225	230	235
Tyr Ala Ile Arg Glu Ser Asn Ser Ile Val Lys Ile Phe Lys Asn Phe		
	245	250
Lys Glu Lys Lys Ser Phe Lys Pro Asp Phe Gly Ala Glu Ser Ile Tyr		
	260	265
Gly Gly Phe Leu Leu Gly Val Arg Ser Val Asn Gly Leu Ala Phe Tyr		
	275	280
Asp Trp Asp Asn Thr Glu Leu Ile Arg Arg Ile Glu Ile Gln Pro Lys		
	290	295
His Ile Phe Trp Ser Asp Ser Gly Glu Leu Val Cys Ile Ala Thr Glu		
305	310	315
Glu Ser Phe Phe Ile Leu Lys Tyr Leu Ser Glu Lys Val Leu Ala Ala		
	325	330
Gln Glu Thr His Glu Gly Val Thr Glu Asp Gly Ile Glu Asp Ala Phe		
	340	345
Glu Val Leu Gly Glu Ile Gln Glu Ile Val Lys Thr Gly Leu Trp Val		
	355	360
Gly Asp Cys Phe Ile Tyr Thr Ser Ser Val Asn Arg Leu Asn Tyr Tyr		
	370	375
Val Gly Gly Glu Ile Val Thr Ile Ala His Leu Asp Arg Thr Met Tyr		

385	390	395	400
Leu Leu Gly Tyr Ile Pro Lys Asp Asn Arg Leu Tyr Leu Gly Asp Lys	405	410	415
Glu Leu Asn Ile Ile Ser Tyr Ser Leu Leu Val Ser Val Leu Glu Tyr	420	425	430
Gln Thr Ala Val Met Arg Arg Asp Phe Ser Met Ala Asp Lys Val Leu	435	440	445
Pro Thr Ile Pro Lys Glu Gln Arg Thr Arg Val Ala His Phe Leu Glu	450	455	460
Lys Gln Gly Phe Lys Gln Gln Ala Leu Thr Val Ser Thr Asp Pro Glu	465	470	475
His Arg Phe Glu Leu Ala Leu Gln Leu Gly Glu Leu Lys Ile Ala Tyr	485	490	495
Gln Leu Ala Val Glu Ala Glu Ser Glu Gln Lys Trp Lys Gln Leu Ala	500	505	510
Glu Leu Ala Ile Ser Lys Cys Gln Phe Gly Leu Ala Gln Glu Cys Leu	515	520	525
His His Ala Gln Asp Tyr Gly Gly Leu Leu Leu Leu Ala Thr Ala Ser	530	535	540
Gly Asn Ala Asn Met Val Asn Lys Leu Ala Glu Gly Ala Glu Arg Asp	545	550	555
Gly Lys Asn Asn Val Ala Phe Met Ser Tyr Phe Leu Gln Gly Lys Val	565	570	575
Asp Ala Cys Leu Glu Leu Leu Ile Arg Thr Gly Arg Leu Pro Glu Ala	580	585	590
Ala Phe Leu Ala Arg Thr Tyr Leu Pro Ser Gln Val Ser Arg Val Val	595	600	605
Lys Leu Trp Arg Glu Asn Leu Ser Lys Val Asn Gln Lys Ala Ala Glu	610	615	620
Ser Leu Ala Asp Pro Thr Glu Tyr Glu Asn Leu Phe Pro Gly Leu Lys	625	630	635
Glu Ala Phe Val Val Glu Glu Trp Val Lys Glu Thr His Ala Asp Leu	645	650	655
Trp Pro Ala Lys Gln Tyr Pro Leu Val Thr Pro Asn Glu Glu Arg Asn			



660                                      665                                      670  
 Val Met Glu Glu Gly Lys Asp Phe Gln Pro Ser Arg Ser Thr Ala Gln  
           675                                      680                                      685  
 Gln Glu Leu Asp Gly Lys Pro Ala Ser Pro Thr Pro Val Ile Val Ala  
           690                                      695                                      700  
 Ser His Thr Ala Asn Lys Glu Glu Lys Ser Leu Leu Glu Leu Glu Val  
 705                                      710                                      715                                      720  
 Asp Leu Asp Asn Leu Glu Leu Glu Asp Ile Asp Thr Thr Asp Ile Asn  
                                     725                                      730                                      735  
 Leu Asp Glu Asp Ile Leu Asp Asp  
                                     740

<210> 1348  
 <211> 314  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (18)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (87)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 1348  
 Asn Thr Val Val Met Lys Val Ala Glu Gln Thr Pro Leu Ser Ala Leu  
   1                                    5                                    10                                    15  
 Tyr Xaa Ala Ser Leu Ile Lys Glu Ala Gly Phe Pro Pro Gly Val Val  
                                     20                                    25                                    30  
 Asn Ile Ile Thr Gly Tyr Gly Pro Thr Ala Gly Ala Ala Ile Ala Gln  
                                     35                                    40                                    45  
 His Met Asp Val Asp Lys Val Ala Phe Thr Gly Ser Thr Glu Val Gly  
                                     50                                    55                                    60  
 His Leu Ile Gln Lys Ala Ala Gly Asp Ser Asn Leu Lys Arg Val Thr  
   65                                    70                                    75                                    80  
 Leu Glu Leu Gly Gly Lys Xaa Pro Ser Ile Val Leu Ala Asp Ala Asp

85					90					95						
Met	Glu	His	Ala	Val	Glu	Gln	Cys	His	Glu	Ala	Leu	Phe	Phe	Asn	Met	
100					105					110						
Gly	Gln	Cys	Cys	Cys	Ala	Gly	Ser	Arg	Thr	Phe	Val	Glu	Glu	Ser	Ile	
115					120					125						
Tyr	Asn	Glu	Phe	Leu	Glu	Arg	Thr	Val	Glu	Lys	Ala	Lys	Gln	Arg	Lys	
130					135					140						
Val	Gly	Asn	Pro	Phe	Glu	Leu	Asp	Thr	Gln	Gln	Gly	Pro	Gln	Val	Asp	
145					150					155					160	
Lys	Glu	Gln	Phe	Glu	Arg	Val	Leu	Gly	Tyr	Ile	Gln	Leu	Gly	Gln	Lys	
165					170					175						
Glu	Gly	Ala	Lys	Leu	Leu	Cys	Gly	Gly	Glu	Arg	Phe	Gly	Glu	Arg	Gly	
180					185					190						
Phe	Phe	Ile	Lys	Pro	Thr	Val	Phe	Gly	Gly	Val	Gln	Asp	Asp	Met	Arg	
195					200					205						
Ile	Ala	Lys	Glu	Glu	Ile	Phe	Gly	Pro	Val	Gln	Pro	Leu	Phe	Lys	Phe	
210					215					220						
Lys	Lys	Ile	Glu	Glu	Val	Val	Glu	Arg	Ala	Asn	Asn	Thr	Arg	Tyr	Gly	
225					230					235					240	
Leu	Ala	Ala	Ala	Val	Phe	Thr	Arg	Asp	Leu	Asp	Lys	Ala	Met	Tyr	Phe	
245					250					255						
Thr	Gln	Ala	Leu	Gln	Ala	Gly	Thr	Val	Trp	Val	Asn	Thr	Tyr	Asn	Ile	
260					265					270						
Val	Thr	Cys	His	Thr	Pro	Phe	Gly	Gly	Phe	Lys	Glu	Ser	Gly	Asn	Gly	
275					280					285						
Arg	Glu	Leu	Gly	Glu	Asp	Gly	Leu	Lys	Ala	Tyr	Thr	Glu	Val	Lys	Thr	
290					295					300						
Val	Thr	Ile	Lys	Val	Pro	Gln	Lys	Asn	Ser							
305					310											

<210> 1349  
 <211> 146  
 <212> PRT  
 <213> Homo sapiens

&lt;400&gt; 1349

Arg Cys Pro Ile Ala Ser Glu Val Pro Trp Thr Ile Thr Glu Ala Glu  
1 5 10 15

Leu Arg Val Thr Leu Thr Val Glu Gly Lys Ser Ile Pro Cys Leu Ile  
20 25 30

Asp Thr Gly Ala Thr His Ser Thr Leu Pro Ser Phe Gln Gly Pro Val  
35 40 45

Ser Leu Ala Pro Ile Thr Val Val Gly Ile Asp Gly Gln Ala Ser Lys  
50 55 60

Pro Leu Lys Thr Pro Pro Leu Trp Cys Gln Leu Gly Gln His Ser Phe  
65 70 75 80

Met His Ser Phe Leu Val Ile Pro Thr Cys Pro Leu Pro Leu Leu Gly  
85 90 95

Arg Asn Ile Leu Thr Lys Leu Ser Ala Ser Leu Thr Ile Pro Gly Val  
100 105 110

Gln Leu His Leu Ile Ala Ala Leu Leu Pro Asn Pro Lys Pro Pro Leu  
115 120 125

Cys Pro Leu Thr Ser Pro Gln Tyr His Pro Leu Pro Gln Asp Leu Pro  
130 135 140

Ser Ala  
145

&lt;210&gt; 1350

&lt;211&gt; 296

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (53)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1350

Pro Thr Arg Pro Arg Thr Arg Gly Ala Ile Phe Ala Ala Arg Thr Arg  
1 5 10 15

Ser Glu Arg Leu Arg Glu Ser Glu Thr Leu Ser Ala Ser Ile Arg Arg  
20 25 30

Ala Asp Pro Ala Gly Ala Ala Ala Ala Met Asp Asp Arg Glu Asp Leu

35 40 45

Val Tyr Gln Ala Xaa Leu Ala Glu Gln Ala Glu Arg Tyr Asp Glu Met  
50 55 60

Val Glu Ser Met Lys Lys Val Ala Gly Met Asp Val Glu Leu Thr Val  
65 70 75 80

Glu Glu Arg Asn Leu Leu Ser Val Ala Tyr Lys Asn Val Ile Gly Ala  
85 90 95

Arg Arg Ala Ser Trp Arg Ile Ile Ser Ser Ile Glu Gln Lys Glu Glu  
100 105 110

Asn Lys Gly Gly Glu Asp Lys Leu Lys Met Ile Arg Glu Tyr Arg Gln  
115 120 125

Met Val Glu Thr Glu Leu Lys Leu Ile Cys Cys Asp Ile Leu Asp Val  
130 135 140

Leu Asp Lys His Leu Ile Pro Ala Ala Asn Thr Gly Glu Ser Lys Val  
145 150 155 160

Phe Tyr Tyr Lys Met Lys Gly Asp Tyr His Arg Tyr Leu Ala Glu Phe  
165 170 175

Ala Thr Gly Asn Asp Arg Lys Glu Ala Ala Glu Asn Ser Leu Val Ala  
180 185 190

Tyr Lys Ala Ala Ser Asp Ile Ala Met Thr Glu Leu Pro Pro Thr His  
195 200 205

Pro Ile Arg Leu Gly Leu Ala Leu Asn Phe Ser Val Phe Tyr Tyr Glu  
210 215 220

Ile Leu Asn Ser Pro Asp Arg Ala Cys Arg Leu Ala Lys Ala Ala Phe  
225 230 235 240

Asp Asp Ala Ile Ala Glu Leu Asp Thr Leu Ser Glu Glu Ser Tyr Lys  
245 250 255

Asp Ser Thr Leu Ile Met Gln Leu Leu Arg Asp Asn Leu Thr Leu Trp  
260 265 270

Thr Ser Asp Met Gln Gly Asp Gly Glu Glu Gln Asn Lys Glu Ala Leu  
275 280 285

Gln Asp Val Glu Asp Glu Asn Gln  
290 295

<210> 1351  
<211> 184  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (126)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (131)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (136)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (137)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (143)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (146)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (147)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (149)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (152)  
<223> Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (159)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (163)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1351

Gly	Ser	Ala	Pro	Glu	Thr	Ser	Pro	Glu	Lys	Cys	Ser	Ser	Arg	Ala	Lys
1				5					10					15	

Ser	Cys	Lys	Val	Ile	Arg	Lys	Asn	Ile	Val	Lys	Lys	Cys	Leu	Glu	Leu
			20					25						30	

Phe	Ser	Glu	Leu	Ala	Glu	Asp	Lys	Glu	Asn	Tyr	Lys	Lys	Phe	Tyr	Glu
			35					40					45		

Ala	Phe	Ser	Lys	Asn	Leu	Lys	Leu	Gly	Ile	His	Glu	Asp	Ser	Thr	Asn
			50				55					60			

Arg	Arg	Arg	Leu	Ser	Glu	Leu	Leu	Arg	Tyr	His	Thr	Ser	Gln	Ser	Gly
			65				70				75				80

Asp	Glu	Met	Thr	Ser	Leu	Ser	Glu	Tyr	Val	Ser	Arg	Met	Lys	Glu	Thr
					85				90					95	

Gln	Lys	Ser	Ile	Tyr	Tyr	Ile	Thr	Gly	Glu	Ser	Lys	Glu	Gln	Val	Ala
			100					105						110	

Asn	Ser	Ala	Phe	Val	Glu	Arg	Val	Arg	Lys	Arg	Gly	Phe	Xaa	Val	Val
			115					120					125		

Tyr	Met	Xaa	Glu	Pro	Ile	Asp	Xaa	Xaa	Cys	Val	Gln	Gln	Leu	Xaa	Glu
			130				135					140			

Phe	Xaa	Xaa	Lys	Xaa	Leu	Val	Xaa	Val	Thr	Lys	Glu	Val	Trp	Xaa	Cys
			145			150				155					160

Leu	Arg	Xaa	Arg	Arg	Glu	Glu	Glu	Asp	Gly	Arg	Glu	Gln	Gly	Lys	Phe
					165					170					175

Arg	Pro	Cys	Ser	Ser	Glu	Glu	Ser
							180

&lt;210&gt; 1352

&lt;211&gt; 415

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1352

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Trp Ile Pro Arg Ala Ala Gly Ile Arg His Glu Leu His Leu Lys Glu
 1             5             10             15

Asp Gln Thr Glu Tyr Leu Glu Glu Arg Arg Val Lys Glu Val Val Lys
          20             25             30

Lys His Ser Gln Phe Ile Gly Tyr Pro Ile Thr Leu Tyr Leu Glu Lys
          35             40             45

Glu Arg Glu Lys Glu Ile Ser Asp Asp Glu Ala Glu Glu Glu Lys Gly
          50             55             60

Glu Lys Glu Glu Glu Asp Lys Asp Asp Glu Glu Lys Pro Lys Ile Glu
          65             70             75             80

Asp Val Gly Ser Asp Glu Glu Asp Asp Ser Gly Lys Asp Lys Lys Lys
          85             90             95

Lys Thr Lys Lys Ile Lys Glu Lys Tyr Ile Asp Gln Glu Glu Leu Asn
          100             105             110

Lys Thr Lys Pro Ile Trp Thr Arg Asn Pro Asp Asp Ile Thr Gln Glu
          115             120             125

Glu Tyr Gly Glu Phe Tyr Lys Ser Leu Thr Asn Asp Trp Glu Asp His
          130             135             140

Leu Ala Val Lys His Phe Ser Val Glu Gly Gln Leu Glu Phe Arg Ala
          145             150             155             160

Leu Leu Phe Ile Pro Arg Arg Ala Pro Phe Asp Leu Phe Glu Asn Lys
          165             170             175

Lys Lys Lys Asn Asn Ile Lys Leu Tyr Val Arg Arg Val Phe Ile Met
          180             185             190

Asp Ser Cys Asp Glu Leu Ile Pro Glu Tyr Leu Asn Phe Ile Arg Gly
          195             200             205

Val Val Asp Ser Glu Asp Leu Pro Leu Asn Ile Ser Arg Glu Met Leu
          210             215             220

Gln Gln Ser Lys Ile Leu Lys Val Ile Arg Lys Asn Ile Val Lys Lys
          225             230             235             240

Cys Leu Glu Leu Phe Ser Glu Leu Ala Glu Asp Lys Glu Asn Tyr Lys
          245             250             255

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Lys Phe Tyr Glu Ala Phe Ser Lys Asn Leu Lys Leu Gly Ile His Glu  
                   260                                  265                                  270

Asp Ser Thr Asn Arg Arg Arg Leu Ser Glu Leu Leu Arg Tyr His Thr  
                   275                                  280                                  285

Ser Gln Ser Gly Asp Glu Met Thr Ser Leu Ser Glu Tyr Val Ser Arg  
                   290                                  295                                  300

Met Lys Glu Thr Gln Lys Ser Ile Tyr Tyr Ile Thr Gly Glu Ser Lys  
                   305                                  310                                  315                                  320

Glu Gln Val Ala Asn Ser Ala Phe Val Glu Arg Val Arg Lys Arg Gly  
                                   325                                  330                                  335

Phe Glu Val Val Tyr Met Thr Glu Pro Ile Asp Glu Tyr Cys Val Gln  
                   340                                  345                                  350

Gln Leu Lys Glu Phe Asp Gly Lys Ser Leu Val Ser Val Thr Lys Glu  
                   355                                  360                                  365

Gly Leu Glu Leu Pro Glu Asp Glu Glu Glu Lys Lys Lys Met Glu Glu  
                   370                                  375                                  380

Ser Lys Ala Lys Phe Glu Asn Leu Cys Lys Leu Met Gly Tyr Met Met  
                   385                                  390                                  395                                  400

Ala Lys Lys His Trp Arg Ser Thr Leu Thr Thr Pro Phe Leu Glu  
                                   405                                  410                                  415

<210> 1353

<211> 256

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (10)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1353

Ser Pro Ile Ser Asp Gly Asn Asp Ala Xaa Leu Arg His Val Asn Ile  
   1                                  5                                  10                                  15

Asp His Leu His Val Gly Trp Tyr Gln Ser Thr Tyr Tyr Gly Ser Phe  
                   20                                  25                                  30

Val Thr Arg Ala Leu Leu Asp Ser Gln Phe Ser Tyr Gln His Ala Ile



35	40	45
Glu Glu Ser Val Val Leu Ile Tyr Asp Pro Ile Lys Thr Ala Gln Gly		
50	55	60
Ser Leu Ser Leu Lys Ala Tyr Arg Leu Thr Pro Lys Leu Met Glu Val		
65	70	75 80
Cys Lys Glu Lys Asp Phe Ser Pro Glu Ala Leu Lys Lys Ala Asn Ile		
85	90	95
Thr Phe Glu Tyr Met Phe Glu Glu Val Pro Ile Val Ile Lys Asn Ser		
100	105	110
His Leu Ile Asn Val Leu Met Trp Glu Leu Glu Lys Lys Ser Ala Val		
115	120	125
Ala Asp Lys His Glu Leu Leu Ser Leu Ala Ser Ser Asn His Leu Gly		
130	135	140
Lys Asn Leu Gln Leu Leu Met Asp Arg Val Asp Glu Met Ser Gln Asp		
145	150	155 160
Ile Val Lys Tyr Asn Thr Tyr Met Arg Asn Thr Ser Lys Gln Gln Gln		
165	170	175
Gln Lys His Gln Tyr Gln Gln Arg Arg Gln Gln Glu Asn Met Gln Arg		
180	185	190
Gln Ser Arg Gly Glu Pro Pro Leu Pro Glu Glu Asp Leu Ser Lys Leu		
195	200	205
Phe Lys Pro Pro Gln Pro Pro Ala Arg Met Asp Ser Leu Leu Ile Ala		
210	215	220
Gly Gln Ile Asn Thr Tyr Cys Gln Asn Ile Lys Glu Phe Thr Ala Gln		
225	230	235 240
Asn Leu Gly Lys Leu Phe Met Ala Gln Ala Leu Gln Glu Tyr Asn Asn		
245	250	255

&lt;210&gt; 1354

&lt;211&gt; 210

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (192)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (208)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1354

Ile	Met	Lys	Leu	Leu	Thr	Arg	Ala	Gly	Ser	Phe	Ser	Arg	Phe	Tyr	Ser	1	5	10	15
Leu	Lys	Val	Ala	Pro	Lys	Val	Lys	Ala	Thr	Ala	Ala	Pro	Ala	Gly	Ala	20	25	30	
Pro	Pro	Gln	Pro	Gln	Asp	Leu	Glu	Phe	Thr	Lys	Leu	Pro	Asn	Gly	Leu	35	40	45	
Val	Ile	Ala	Ser	Leu	Glu	Asn	Tyr	Ser	Pro	Val	Ser	Arg	Ile	Gly	Leu	50	55	60	
Phe	Ile	Lys	Ala	Gly	Ser	Arg	Tyr	Glu	Asp	Phe	Ser	Asn	Leu	Gly	Thr	65	70	75	80
Thr	His	Leu	Leu	Arg	Leu	Thr	Ser	Ser	Leu	Thr	Thr	Lys	Gly	Ala	Ser	85	90	95	
Ser	Phe	Lys	Ile	Thr	Arg	Gly	Ile	Glu	Ala	Val	Gly	Gly	Lys	Leu	Ser	100	105	110	
Val	Thr	Ala	Thr	Arg	Glu	Asn	Met	Ala	Tyr	Thr	Val	Glu	Cys	Leu	Arg	115	120	125	
Gly	Asp	Val	Asp	Ile	Leu	Met	Glu	Phe	Leu	Leu	Asn	Val	Thr	Thr	Ala	130	135	140	
Pro	Glu	Phe	Arg	Arg	Trp	Glu	Val	Ala	Asp	Leu	Gln	Pro	Gln	Leu	Lys	145	150	155	160
Ile	Asp	Lys	Ala	Val	Ala	Phe	Gln	Asn	Pro	Gln	Thr	His	Val	Ile	Glu	165	170	175	
Asn	Leu	His	Ala	Ala	Ala	Tyr	Arg	Asn	Ala	Leu	Ala	Asn	Pro	Leu	Xaa	180	185	190	
Cys	Pro	Asp	Tyr	Arg	Ile	Gly	Lys	Val	Thr	Ser	Glu	Glu	Val	Pro	Xaa	195	200	205	
Lys	Leu																		

210

&lt;210&gt; 1355

&lt;211&gt; 316

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (309)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1355

Ser Ser Ala Ser Leu Pro Gly Ala Val Ala Ala Leu Ser Pro Leu Arg  
1 5 10 15

Ile Met Ala Thr Ala Glu Val Leu Asn Ile Gly Lys Lys Leu Tyr Glu  
20 25 30

Gly Lys Thr Lys Glu Val Tyr Glu Leu Leu Asp Ser Pro Gly Lys Val  
35 40 45

Leu Leu Gln Ser Lys Asp Gln Ile Thr Ala Gly Asn Ala Ala Arg Lys  
50 55 60

Asn His Leu Glu Gly Lys Ala Ala Ile Ser Asn Lys Ile Thr Ser Cys  
65 70 75 80

Ile Phe Gln Leu Leu Gln Glu Ala Gly Ile Lys Thr Ala Phe Thr Arg  
85 90 95

Lys Cys Gly Glu Thr Ala Phe Ile Ala Pro Gln Cys Glu Met Ile Pro  
100 105 110

Ile Glu Trp Val Cys Arg Arg Ile Ala Thr Gly Ser Phe Leu Lys Arg  
115 120 125

Asn Pro Gly Val Lys Glu Gly Tyr Lys Phe Tyr Pro Pro Lys Val Glu  
130 135 140

Leu Phe Phe Lys Asp Asp Ala Asn Asn Asp Pro Gln Trp Ser Glu Glu  
145 150 155 160

Gln Leu Ile Ala Ala Lys Phe Cys Phe Ala Gly Leu Leu Ile Gly Gln  
165 170 175

Thr Glu Val Asp Ile Met Ser His Ala Thr Gln Ala Ile Phe Glu Ile  
180 185 190

Leu Glu Lys Ser Trp Leu Pro Gln Asn Cys Thr Leu Val Asp Met Lys  
 195 200 205  
 Ile Glu Phe Gly Val Asp Val Thr Thr Lys Glu Ile Val Leu Ala Asp  
 210 215 220  
 Val Ile Asp Asn Asp Ser Trp Arg Leu Trp Pro Ser Gly Asp Arg Ser  
 225 230 235 240  
 Gln Gln Lys Asp Lys Gln Ser Tyr Arg Asp Leu Lys Glu Val Thr Pro  
 245 250 255  
 Glu Gly Leu Gln Met Val Lys Lys Asn Phe Glu Trp Val Ala Glu Arg  
 260 265 270  
 Val Glu Leu Leu Leu Lys Ser Glu Ser Gln Cys Arg Val Val Val Leu  
 275 280 285  
 Met Gly Ser Thr Ser Asp Leu Gly His Cys Glu Lys Ile Lys Lys Ala  
 290 295 300  
 Cys Gly Asn Phe Xaa His Ser Met Val Asn Phe Glu  
 305 310 315

<210> 1356  
 <211> 368  
 <212> PRT  
 <213> Homo sapiens

<400> 1356  
 Pro Gly Ser Ala Cys Lys Ala Val Ser Ser Leu Pro Gln Glu Lys Met  
 1 5 10 15  
 Ala Val Ala Val Arg Thr Leu Gln Glu Gln Leu Glu Lys Ala Lys Glu  
 20 25 30  
 Ser Leu Lys Asn Val Asp Glu Asn Ile Arg Lys Leu Thr Gly Arg Asp  
 35 40 45  
 Pro Asn Asp Val Arg Pro Ile Gln Ala Arg Leu Leu Ala Leu Ser Gly  
 50 55 60  
 Pro Gly Gly Gly Arg Gly Arg Gly Ser Leu Leu Arg Arg Gly Phe  
 65 70 75 80  
 Ser Asp Ser Gly Gly Gly Pro Pro Ala Lys Gln Arg Asp Leu Glu Gly  
 85 90 95  
 Ala Val Ser Arg Leu Gly Gly Glu Arg Arg Thr Arg Arg Glu Ser Arg

100	105	110
Gln Glu Ser Asp Pro Glu Asp Asp Asp Val Lys Lys Pro Ala Leu Gln		
115	120	125
Ser Ser Val Val Ala Thr Ser Lys Glu Arg Thr Arg Arg Asp Leu Ile		
130	135	140
Gln Asp Gln Asn Met Asp Glu Lys Gly Lys Gln Arg Asn Arg Arg Ile		
145	150	155
Phe Gly Leu Leu Met Gly Thr Leu Gln Lys Phe Lys Gln Glu Ser Thr		
165	170	175
Val Ala Thr Glu Arg Gln Lys Arg Arg Gln Glu Ile Glu Gln Lys Leu		
180	185	190
Glu Val Gln Ala Glu Glu Glu Arg Lys Gln Val Glu Asn Glu Arg Arg		
195	200	205
Glu Leu Phe Glu Glu Arg Arg Ala Lys Gln Thr Glu Leu Arg Leu Leu		
210	215	220
Glu Gln Lys Val Glu Leu Ala Gln Leu Gln Glu Glu Trp Asn Glu His		
225	230	235
Asn Ala Lys Ile Ile Lys Tyr Ile Arg Thr Lys Thr Lys Pro His Leu		
245	250	255
Phe Tyr Ile Pro Gly Arg Met Cys Pro Ala Thr Gln Lys Leu Ile Glu		
260	265	270
Glu Ser Gln Arg Lys Met Asn Ala Leu Phe Glu Gly Arg Arg Ile Glu		
275	280	285
Phe Ala Glu Gln Ile Asn Lys Met Glu Ala Arg Pro Arg Arg Gln Ser		
290	295	300
Met Lys Glu Lys Glu His Gln Val Val Arg Asn Glu Glu Gln Lys Ala		
305	310	315
Glu Gln Glu Glu Gly Lys Val Ala Gln Arg Glu Glu Glu Leu Glu Glu		
325	330	335
Thr Gly Asn Gln His Asn Asp Val Glu Lys Lys Glu Lys Lys Gly Lys		
340	345	350
Glu Glu Lys Lys Glu Arg Lys Lys Arg Lys Glu Arg Lys Glu Lys Lys		
355	360	365

&lt;210&gt; 1357

&lt;211&gt; 201

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1357

Ala	Leu	Ile	Met	Ser	Phe	Ile	Phe	Glu	Trp	Ile	Tyr	Asn	Gly	Phe	Ser
1				5					10					15	
Ser	Val	Leu	Gln	Phe	Leu	Gly	Leu	Tyr	Lys	Lys	Ser	Gly	Lys	Leu	Val
			20					25						30	
Phe	Leu	Gly	Leu	Asp	Asn	Ala	Gly	Lys	Thr	Thr	Leu	Leu	His	Met	Leu
		35					40						45		
Lys	Asp	Asp	Arg	Leu	Gly	Gln	His	Val	Pro	Thr	Leu	His	Pro	Thr	Ser
	50					55					60				
Glu	Glu	Leu	Thr	Ile	Ala	Gly	Met	Thr	Phe	Thr	Thr	Phe	Asp	Leu	Gly
65					70				75					80	
Gly	His	Glu	Gln	Ala	Arg	Arg	Val	Trp	Lys	Asn	Tyr	Leu	Pro	Ala	Ile
			85						90					95	
Asn	Gly	Ile	Val	Phe	Leu	Val	Asp	Cys	Ala	Asp	His	Ser	Arg	Leu	Val
		100						105					110		
Glu	Ser	Lys	Val	Glu	Leu	Asn	Ala	Leu	Met	Thr	Asp	Glu	Thr	Ile	Ser
		115					120					125			
Asn	Val	Pro	Ile	Leu	Ile	Leu	Gly	Asn	Lys	Ile	Asp	Arg	Thr	Asp	Ala
		130				135					140				
Ile	Ser	Glu	Glu	Lys	Leu	Arg	Glu	Ile	Phe	Gly	Leu	Tyr	Gly	Gln	Thr
145					150					155					160
Thr	Gly	Lys	Gly	Asn	Val	Thr	Leu	Lys	Glu	Leu	Asn	Ala	Arg	Pro	Met
			165						170					175	
Glu	Val	Phe	Met	Cys	Ser	Val	Leu	Lys	Arg	Gln	Gly	Tyr	Gly	Glu	Gly
			180					185					190		
Phe	Arg	Trp	Leu	Ser	Gln	Tyr	Ile	Asp							
		195					200								

<210> 1358  
<211> 224  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (71)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (129)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (169)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (196)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (221)  
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1358  
Val Ser Gln Cys Ala Ala Arg Tyr Gly Pro Thr Gly Pro Arg Gly Arg  
1 5 10 15  
Arg Arg His Gly Ala Val Phe Asp Leu Asp Leu Glu Thr Glu Glu Gly  
20 25 30  
Ser Glu Gly Glu Gly Glu Pro Glu Leu Ser Pro Ala Asp Ala Cys Pro  
35 40 45  
Leu Ala Glu Leu Arg Ala Ala Gly Leu Glu Pro Val Gly His Tyr Glu  
50 55 60  
Glu Val Phe Gln Val Arg Xaa Val Gln Gly Thr Asn Leu Gly Lys Ile  
65 70 75 80  
Tyr Ala Met Lys Val Leu Arg Lys Ala Lys Ile Val Arg Asn Ala Lys  
85 90 95  
Asp Thr Ala His Thr Arg Ala Glu Arg Asn Ile Leu Glu Ser Val Lys  
100 105 110

His Pro Phe Ile Val Glu Leu Ala Tyr Ala Phe Gln Thr Gly Gly Lys  
 115 120 125

Xaa Tyr Leu Ile Leu Glu Cys Leu Ser Gly Gly Glu Leu Phe Thr His  
 130 135 140

Leu Gly Ala Arg Gly His Leu Pro Gly Lys Ile Arg Pro Ala Ser Thr  
 145 150 155 160

Trp Leu Arg Ser Arg Trp Pro Trp Xaa Ile Ser Thr Pro Arg Ala Ser  
 165 170 175

Ser Thr Gly Asp Leu Lys Pro Glu Glu His His Gly Ser Ala Ala Arg  
 180 185 190

Ala His Ile Xaa Thr Asp Arg Leu Leu Asp Phe Trp Gln Gly Val Leu  
 195 200 205

Phe His Gly Gly Arg Pro Ser Ile Asp Asn Phe Leu Xaa Ala Thr Ile  
 210 215 220

<210> 1359

<211> 336

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (225)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (230)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1359

Gly Gly Arg Pro Glu Thr Glu Lys Gly Glu Ser Gly Ser Phe Pro Ala  
 1 5 10 15

Arg Arg Thr Phe Glu Val Glu Lys Arg Thr Pro Gly Thr Cys Ala Gln  
 20 25 30

His Trp Asp Phe Leu Asp Ser Thr Met Thr Leu Asn Asn Val Thr Met  
 35 40 45



Arg Gln Gly Thr Val Gly Met Gln Pro Gln Gln Gln Arg Trp Ser Ile  
 50 55 60

Pro Ala Asp Gly Arg His Leu Met Val Gln Lys Glu Pro His Gln Tyr  
 65 70 75 80

Ser His Arg Asn Arg His Ser Ala Thr Pro Glu Asp His Cys Arg Arg  
 85 90 95

Ser Trp Ser Ser Asp Ser Thr Asp Ser Val Ile Ser Ser Glu Ser Gly  
 100 105 110

Asn Thr Tyr Tyr Arg Val Val Leu Ile Gly Glu Gln Gly Val Gly Lys  
 115 120 125

Ser Thr Leu Ala Asn Ile Phe Ala Gly Val His Asp Ser Met Asp Ser  
 130 135 140

Asp Cys Glu Val Leu Gly Glu Asp Thr Tyr Glu Arg Thr Leu Met Val  
 145 150 155 160

Asp Gly Glu Ser Ala Thr Ile Ile Leu Leu Asp Met Trp Glu Asn Lys  
 165 170 175

Gly Glu Asn Glu Trp Leu His Asp His Cys Met Gln Val Gly Asp Ala  
 180 185 190

Tyr Leu Ile Val Tyr Ser Ile Thr Asp Arg Ala Ser Phe Glu Lys Ala  
 195 200 205

Ser Glu Leu Arg Ile Gln Leu Arg Arg Ala Arg Gln Thr Glu Asp Ile  
 210 215 220

Xaa Ile Ile Leu Val Xaa Asn Lys Ser Asp Leu Val Arg Cys Arg Glu  
 225 230 235 240

Val Ser Val Ser Glu Gly Arg Ala Cys Ala Val Val Phe Asp Cys Lys  
 245 250 255

Phe Ile Glu Thr Ser Ala Ala Val Gln His Asn Val Lys Glu Leu Phe  
 260 265 270

Glu Gly Ile Val Arg Gln Val Arg Leu Arg Arg Ser Ser Lys Glu Lys  
 275 280 285

Asn Glu Arg Arg Leu Ala Tyr Gln Lys Arg Lys Glu Ser Met Pro Arg  
 290 295 300

Lys Ala Arg Arg Phe Trp Gly Lys Ile Val Ala Lys Asn Asn Lys Asn  
 305 310 315 320

Met Ala Phe Lys Leu Lys Ser Lys Ser Cys His Asp Leu Ser Val Leu  
                   325                                  330                                  335

<210> 1360

<211> 344

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (2)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1360

Thr Xaa Asn Leu Gln Arg Phe Gly Met Asn Gly Gln Met Leu Cys Asn  
   1                  5                                  10                                  15

Leu Gly Lys Glu Arg Phe Leu Glu Leu Ala Pro Asp Phe Val Gly Asp  
                   20                                  25                                  30

Ile Leu Trp Glu His Leu Glu Gln Met Ile Lys Glu Asn Gln Glu Lys  
                   35                                  40                                  45

Thr Glu Asp Gln Tyr Glu Glu Asn Ser His Leu Thr Ser Val Pro His  
                   50                                  55                                  60

Trp Ile Asn Ser Asn Thr Leu Gly Phe Gly Thr Glu Gln Ala Pro Tyr  
   65                                  70                                  75                                  80

Gly Met Gln Thr Gln Asn Tyr Pro Lys Gly Gly Leu Leu Asp Ser Met  
                                   85                                  90                                  95

Cys Pro Ala Ser Thr Pro Ser Val Leu Ser Ser Glu Gln Glu Phe Gln  
                   100                                  105                                  110

Met Phe Pro Lys Ser Arg Leu Ser Ser Val Ser Val Thr Tyr Cys Ser  
                   115                                  120                                  125

Val Ser Gln Asp Phe Pro Gly Ser Asn Leu Asn Leu Leu Thr Asn Asn  
                   130                                  135                                  140

Ser Gly Thr Pro Lys Asp His Asp Ser Pro Glu Asn Gly Ala Asp Ser  
   145                                  150                                  155                                  160

Phe Glu Ser Ser Asp Ser Leu Leu Gln Ser Trp Asn Ser Gln Ser Ser

	165		170		175
Leu Leu Asp Val Gln Arg Val Pro Ser Phe Glu Ser Phe Glu Asp Asp	180	185	190		
Cys Ser Gln Ser Leu Cys Leu Asn Lys Pro Thr Met Ser Phe Lys Asp	195	200	205		
Tyr Ile Gln Glu Arg Ser Asp Pro Val Glu Gln Gly Lys Pro Val Ile	210	215	220		
Pro Ala Ala Val Leu Ala Gly Phe Thr Gly Ser Gly Pro Ile Gln Leu	225	230	235	240	
Trp Gln Phe Leu Leu Glu Leu Leu Ser Asp Lys Ser Cys Gln Ser Phe	245	250	255		
Ile Ser Trp Thr Gly Asp Gly Trp Glu Phe Lys Leu Ala Asp Pro Asp	260	265	270		
Glu Val Ala Arg Arg Trp Gly Lys Arg Lys Asn Lys Pro Lys Met Asn	275	280	285		
Tyr Glu Lys Leu Ser Arg Gly Leu Arg Tyr Tyr Tyr Asp Lys Asn Ile	290	295	300		
Ile His Lys Thr Ser Gly Lys Arg Tyr Val Tyr Arg Phe Val Cys Asp	305	310	315	320	
Leu Gln Asn Leu Leu Gly Phe Thr Pro Glu Glu Leu His Ala Ile Leu	325	330	335		
Gly Val Gln Pro Asp Thr Glu Asp	340				

&lt;210&gt; 1361

&lt;211&gt; 137

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1361

Ala Ser Ala His Thr Cys Thr Pro Pro Gly His Ser Thr Met Pro Ala	1	5	10	15
Cys Arg Leu Gly Pro Leu Ala Ala Ala Leu Leu Leu Ser Leu Leu Leu	20	25	30	
Phe Gly Phe Thr Leu Val Ser Gly Thr Gly Ala Glu Lys Thr Gly Val	35	40	45	

Cys Pro Glu Leu Gln Ala Asp Gln Asn Cys Thr Gln Glu Cys Val Ser  
50 55 60

Asp Ser Glu Cys Ala Asp Asn Leu Lys Cys Cys Ser Ala Gly Cys Ala  
65 70 75 80

Thr Phe Cys Ser Leu Pro Asn Asp Lys Glu Gly Ser Cys Pro Gln Val  
85 90 95

Asn Ile Asn Phe Pro Gln Leu Gly Leu Cys Arg Asp Gln Cys Gln Val  
100 105 110

Asp Ser Gln Cys Pro Gly Gln Met Lys Cys Cys Arg Asn Gly Cys Gly  
115 120 125

Lys Val Ser Cys Val Thr Pro Asn Phe  
130 135

<210> 1362

<211> 162

<212> PRT

<213> Homo sapiens

<400> 1362

Thr Lys Leu Val Met Met Gln Lys Leu Leu Lys Cys Ser Arg Leu Val  
1 5 10 15

Leu Ala Leu Ala Leu Ile Leu Val Leu Glu Ser Ser Val Gln Gly Tyr  
20 25 30

Pro Thr Gln Arg Ala Arg Tyr Gln Trp Val Arg Cys Asn Pro Asp Ser  
35 40 45

Asn Ser Ala Asn Cys Leu Glu Glu Lys Gly Pro Met Phe Glu Leu Leu  
50 55 60

Pro Gly Glu Ser Asn Lys Ile Pro Arg Leu Arg Thr Asp Leu Phe Pro  
65 70 75 80

Lys Thr Arg Ile Gln Asp Leu Asn Arg Ile Phe Pro Leu Ser Glu Asp  
85 90 95

Tyr Ser Gly Ser Gly Phe Gly Ser Gly Ser Gly Ser Gly Ser  
100 105 110

Gly Ser Gly Phe Leu Thr Glu Met Glu Gln Asp Tyr Gln Leu Val Asp  
115 120 125

Glu Ser Asp Ala Phe His Asp Asn Leu Arg Ser Leu Asp Arg Asn Leu  
130 135 140

Pro Ser Asp Ser Gln Asp Leu Gly Gln His Gly Leu Glu Glu Asp Phe  
145 150 155 160

Met Leu

<210> 1363

<211> 113

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (106)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1363

Thr Pro Thr Pro Phe Gly Ser Ala Arg Ala Pro Gln Ala Arg Pro Gly  
1 5 10 15

Arg Arg Asp Gly Arg Met Ser Gly Gly Arg Arg Lys Glu Glu Pro Pro  
20 25 30

Gln Pro Gln Leu Ala Asn Gly Ala Leu Lys Val Ser Val Trp Ser Lys  
35 40 45

Val Leu Arg Ser Asp Ala Ala Trp Glu Asp Lys Asp Glu Phe Leu Asp  
50 55 60

Val Ile Tyr Trp Phe Arg Gln Ile Ile Ala Val Val Leu Gly Val Ile  
65 70 75 80

Leu Gly Ser Phe Ala Ile Thr Arg Val Leu Gly Asn Ser Arg Ile Leu  
85 90 95

Pro Asp Gln Cys Lys Ser Pro Cys Thr Xaa Thr Ser Ala Ile Thr Thr  
100 105 110

Asp

<210> 1364

<211> 217

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (1)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (33)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1364

Xaa Gly Gly Arg Ser Ser Ser Ser Thr Met Ser Thr Gly Gly Asp Phe  
1 5 10 15

Gly Asn Pro Leu Arg Lys Phe Lys Leu Val Phe Leu Gly Glu Gln Ser  
20 25 30

Xaa Gly Lys Thr Ser Leu Ile Thr Arg Phe Met Tyr Asp Ser Phe Asp  
35 40 45

Asn Thr Tyr Gln Ala Thr Ile Gly Ile Asp Phe Leu Ser Lys Thr Met  
50 55 60

Tyr Leu Glu Asp Arg Thr Val Arg Leu Gln Leu Trp Asp Thr Ala Gly  
65 70 75 80

Gln Glu Arg Phe Arg Ser Leu Ile Pro Ser Tyr Ile Arg Asp Ser Thr  
85 90 95

Val Ala Val Val Val Tyr Asp Ile Thr Asn Val Asn Ser Phe Gln Gln  
100 105 110

Thr Thr Lys Trp Ile Asp Asp Val Arg Thr Glu Arg Gly Ser Asp Val  
115 120 125

Ile Ile Met Leu Val Gly Asn Lys Thr Asp Leu Ala Asp Lys Arg Gln  
130 135 140

Val Ser Ile Glu Glu Gly Glu Arg Lys Ala Lys Glu Leu Asn Val Met  
145 150 155 160

Phe Ile Glu Thr Ser Ala Lys Ala Gly Tyr Asn Val Lys Gln Leu Phe  
165 170 175

Arg Arg Val Ala Ala Ala Leu Pro Gly Met Glu Ser Thr Gln Asp Arg  
180 185 190

Ser Arg Glu Asp Met Ile Asp Ile Lys Leu Glu Lys Pro Gln Glu Gln  
195 200 205

Pro Val Ser Glu Gly Gly Cys Ser Cys  
210 215

<210> 1365  
<211> 103  
<212> PRT  
<213> Homo sapiens

<400> 1365  
Lys Ser Leu Asp Ser Val Glu Leu Ser Arg Ser Phe Thr Ile Tyr Ser  
1 5 10 15  
Ser Val Cys Lys Leu Tyr Leu Leu Tyr Ser Gln Ser Ile Phe Thr Val  
20 25 30  
Leu Thr Ile Asp Ser Phe Pro Leu Leu Ile Phe Phe Phe Val Asn Gly  
35 40 45  
Ser Cys Asp Phe Arg Trp Gly Ile Phe Ser Ser Pro Lys Arg Ile Asp  
50 55 60  
Ser Phe Ser Arg Phe Ile Ile Ile Asp Cys Gln Glu Arg Thr Leu Gln  
65 70 75 80  
Gln Gly Cys Thr Leu Asn Ala Val Asp Gly Leu Ser Ser Arg Ile Tyr  
85 90 95  
Arg Leu Gly Leu Met Pro Met  
100

<210> 1366  
<211> 73  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (18)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (46)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (68)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1366

Arg His Cys Met Val Ser Ala Val Val Pro Leu Phe Ile Ser Pro Pro  
1 5 10 15

Asp Xaa Phe Ile Pro His Leu Ile Phe Phe Leu Ala Ala Phe Asn Glu  
20 25 30

Ser Phe Ile Leu Glu Thr Leu Tyr Ile Phe Gly Phe His Xaa Thr Ile  
35 40 45

Leu Thr Leu Phe Cys Pro Val Thr Phe Leu Lys Lys Thr Lys Thr Lys  
50 55 60

Asn Pro Phe Xaa Leu Phe Lys Phe Trp  
65 70

<210> 1367

<211> 238

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (199)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (202)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (211)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (229)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1367

Gly Ile Asp Pro Arg Val Arg Leu Ala Pro Leu Gly Leu Gln Val Ser  
1 5 10 15



Val Glu Gln Arg Thr Pro Val Ser Val Pro Gln Met Gly Phe Val Lys  
20 25 30

Val Val Lys Asn Lys Ala Tyr Phe Lys Arg Tyr Gln Val Lys Phe Arg  
35 40 45

Arg Arg Arg Glu Gly Lys Thr Asp Tyr Tyr Ala Arg Lys Arg Leu Val  
50 55 60

Ile Gln Asp Lys Asn Lys Tyr Asn Thr Pro Lys Tyr Arg Met Ile Val  
65 70 75 80

Arg Val Thr Asn Arg Asp Ile Ile Cys Gln Ile Ala Tyr Ala Arg Ile  
85 90 95

Glu Gly Asp Met Ile Val Cys Ala Ala Tyr Ala His Glu Leu Pro Lys  
100 105 110

Tyr Gly Val Lys Val Gly Leu Thr Asn Tyr Ala Ala Ala Tyr Cys Thr  
115 120 125

Gly Leu Leu Leu Ala Arg Arg Leu Leu Asn Arg Phe Gly Met Asp Lys  
130 135 140

Ile Tyr Glu Gly Gln Val Glu Val Thr Gly Asp Glu Tyr Asn Val Glu  
145 150 155 160

Ser Ile Asp Gly Gln Pro Gly Ala Phe Thr Cys Tyr Leu Asp Ala Gly  
165 170 175

Leu Ala Arg Thr Thr Thr Gly Asn Lys Val Phe Gly Ala Leu Lys Gly  
180 185 190

Ala Val Asp Gly Gly Leu Xaa Ile Pro Xaa Ser Thr Lys Arg Phe Pro  
195 200 205

Gly Tyr Xaa Ser Glu Ser Lys Glu Phe Asn Ala Glu Val His Arg Lys  
210 215 220

His Ile Met Gly Xaa Glu Trp Leu Gln Ile Thr Cys Ala Thr  
225 230 235

&lt;210&gt; 1368

&lt;211&gt; 173

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (149)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (150)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1368

Gly Asp Ser Gln Gly Pro Ala Ser Asp Trp Arg Val Arg Asp Leu Arg  
 1 5 10 15

Pro Val Trp Gly Arg Trp Arg Pro Ala Gln His Leu Lys Ile Thr Asp  
 20 25 30

Ser Ala Gly His Ile Leu Tyr Ser Lys Glu Asp Ala Thr Lys Gly Lys  
 35 40 45

Phe Ala Phe Thr Thr Glu Asp Tyr Asp Met Phe Glu Val Cys Phe Glu  
 50 55 60

Ser Lys Gly Thr Gly Arg Ile Pro Asp Gln Leu Val Ile Leu Asp Met  
 65 70 75 80

Lys His Gly Val Glu Ala Lys Asn Tyr Glu Glu Ile Ala Lys Val Glu  
 85 90 95

Lys Leu Lys Pro Leu Glu Val Glu Leu Arg Arg Leu Glu Asp Leu Ser  
 100 105 110

Glu Ser Ile Val Asn Asp Phe Ala Tyr Met Lys Lys Arg Glu Glu Glu  
 115 120 125

Met Arg Asp Thr Asn Glu Ser Thr Asn Thr Arg Val Leu Tyr Phe Ser  
 130 135 140

Ile Phe Ser Met Xaa Xaa Leu Ile Gly Leu Ala Thr Trp Gln Val Phe  
 145 150 155 160

Tyr Leu Arg Arg Phe Phe Lys Ala Lys Lys Leu Ile Glu  
 165 170

&lt;210&gt; 1369

&lt;211&gt; 98

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1369

Leu Cys Tyr Leu Asp Ile Cys Gly Lys Ala Glu Ser Phe Leu Thr Val

1                      5                      10                      15  
 Lys Ala Glu Val Ser Thr Gly Gly Asn Leu Leu Val Val Ser Pro Thr  
                     20                      25                      30  
 Thr Leu Pro Arg Val Leu Ser Thr Lys Glu Val Lys Arg Thr Glu Lys  
                     35                      40                      45  
 Glu Ile Ser Ile Ser Ala Ala Arg Ala Gly Ile Cys Leu Pro Asp Ser  
                     50                      55                      60  
 Leu Cys Phe Leu Phe His Arg His Pro Phe Arg Arg Glu Leu His Gln  
                     65                      70                      75                      80  
 Phe Ile Met Arg Val Arg Glu Ala Lys Ala Leu Arg Cys Val Gln Gly  
                     85                      90                      95  
 Val Thr

&lt;210&gt; 1370

&lt;211&gt; 168

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (127)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1370

Pro Ala Leu Gly Arg Phe Cys Gly Ser Lys Lys Pro Glu Pro Val Leu  
                     1                      5                      10                      15  
 Ala Thr Gly Ser Arg Met Phe Leu Arg Phe Tyr Ser Asp Asn Ser Val  
                     20                      25                      30  
 Gln Arg Lys Gly Phe Gln Ala Ser His Ala Thr Glu Cys Gly Gly Gln  
                     35                      40                      45  
 Val Arg Ala Asp Val Lys Thr Lys Asp Leu Tyr Ser His Ala Gln Phe  
                     50                      55                      60  
 Gly Asp Asn Asn Tyr Pro Gly Gly Val Asp Cys Glu Trp Val Ile Val  
                     65                      70                      75                      80  
 Ala Glu Glu Gly Tyr Gly Val Glu Leu Val Phe Gln Thr Phe Glu Val  
                     85                      90                      95

Glu Glu Glu Thr Asp Cys Gly Tyr Asp Tyr Met Glu Leu Phe Asp Gly  
100 105 110

Tyr Asp Ser Thr Ala Pro Arg Leu Gly Arg Tyr Cys Gly Ser Xaa Pro  
115 120 125

Pro Glu Glu Val Tyr Ser Ala Gly Asp Ser Ala Val Ser His Ser Ile  
130 135 140

His His Thr Lys Lys Gly Phe His Leu Arg Tyr Thr Ser Thr Lys Phe  
145 150 155 160

Gln Asp Thr Leu His Ser Arg Lys  
165

<210> 1371  
<211> 141  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (131)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (139)  
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1371  
Phe Asp Arg Gly Ala Arg Leu Pro Asp Gly Leu Gly Leu Trp Ser Leu  
1 5 10 15

Arg Gly Pro Leu Arg Arg Leu Val Leu Phe Tyr Gln Gly Lys Leu Cys  
20 25 30

Ser Met Ala Gly Asn Phe Trp Gln Ser Ser His Tyr Leu Gln Trp Ile  
35 40 45

Leu Asp Lys Gln Asp Leu Leu Lys Glu Arg Gln Lys Asp Leu Lys Phe  
50 55 60

Leu Ser Glu Glu Glu Tyr Trp Lys Leu Gln Ile Phe Phe Thr Asn Val  
65 70 75 80

Ile Gln Ala Leu Gly Glu His Leu Lys Leu Arg Gln Gln Val Ile Ala  
85 90 95

Thr Ala Thr Val Tyr Phe Lys Arg Phe Tyr Ala Arg Tyr Ser Leu Lys  
 100 105 110

Ser Ile Asp Pro Val Leu Met Ala Pro Thr Cys Val Phe Leu Ala Ser  
 115 120 125

Lys Val Xaa Gly Lys Lys Ile Phe Phe Phe Xaa Gly Gly  
 130 135 140

<210> 1372

<211> 327

<212> PRT

<213> Homo sapiens

<400> 1372

Lys Gly Val Phe Gly Phe Arg Trp Gly Leu Ala Ala Pro Glu Pro Ser  
 1 5 10 15

Met Ala Ser Ser Arg Ala Ser Ser Thr Ala Thr Lys Thr Lys Ala Pro  
 20 25 30

Asp Asp Leu Val Ala Pro Val Val Lys Lys Pro His Ile Tyr Tyr Gly  
 35 40 45

Ser Leu Glu Glu Lys Glu Arg Glu Arg Leu Ala Lys Gly Glu Ser Gly  
 50 55 60

Ile Leu Gly Lys Asp Gly Leu Lys Ala Gly Ile Glu Ala Gly Asn Ile  
 65 70 75 80

Asn Ile Thr Ser Gly Glu Val Phe Glu Ile Glu Glu His Ile Ser Glu  
 85 90 95

Arg Gln Ala Glu Val Leu Ala Glu Phe Glu Arg Arg Lys Arg Ala Arg  
 100 105 110

Gln Ile Asn Val Ser Thr Asp Asp Ser Glu Val Lys Ala Cys Leu Arg  
 115 120 125

Ala Leu Gly Glu Pro Ile Thr Leu Phe Gly Glu Gly Pro Ala Glu Arg  
 130 135 140

Arg Glu Arg Leu Arg Asn Ile Leu Ser Val Val Gly Thr Asp Ala Leu  
 145 150 155 160

Lys Lys Thr Lys Lys Asp Asp Glu Lys Ser Lys Lys Ser Lys Glu Glu  
 165 170 175

Tyr Gln Gln Thr Trp Tyr His Glu Gly Pro Asn Ser Leu Lys Val Ala



20

25

30

Ala Ile His Ser Pro Arg Pro Pro Lys Met Leu Gly Leu Gln Ala  
35 40 45

<210> 1374  
<211> 114  
<212> PRT  
<213> Homo sapiens

<400> 1374  
Ala Ala Thr Lys Val Thr Leu Ser Leu Asp Thr Ala Ser Val Leu Ser  
1 5 10 15  
Pro Cys Phe Thr Gly His Ser Ile Ser Leu Gln Pro Ser Leu Cys Ala  
20 25 30  
Ser Ala Ile Phe Thr His His Gly Ala Glu Val Arg Arg Gly Ser Leu  
35 40 45  
Gly Ile Trp Arg Pro Val Lys Asp Gln Ala Trp Arg Ala Gln Gly Pro  
50 55 60  
Thr Trp Ala Ser Ser Arg Gly Ala Pro Lys Gly Gln Glu His Pro Lys  
65 70 75 80  
Arg Arg Glu Gly Ser Gln Pro Pro Leu Thr Ala Ser Leu Gln Pro Ser  
85 90 95  
Pro Thr Leu Ile Thr Ile Ser Leu Gln Ala Phe Cys Leu Arg Asp Val  
100 105 110

Ala Pro

<210> 1375  
<211> 100  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (92)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE

<222> (93)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1375

Glu Ala Val Asn Glu Gln Leu Ser Ser Glu Arg Ser Asn Leu Ala Gln  
1 5 10 15

Val Ile Arg Gln Glu Phe Glu Asp Arg Leu Ala Ala Ser Glu Glu Glu  
20 25 30

Thr Arg Gln Ala Lys Ala Glu Leu Ala Thr Leu Gln Ala Arg Gln Gln  
35 40 45

Leu Glu Leu Glu Glu Val His Arg Arg Val Lys Thr Ala Leu Ala Arg  
50 55 60

Lys Glu Glu Ala Val Ser Ser Leu Arg Thr Gln His Glu Val Ser Pro  
65 70 75 80

Cys Gly Gln Pro Cys Trp Thr Ser Gly Leu Gly Xaa Xaa Leu Thr Leu  
85 90 95

Trp Val Cys Cys  
100

<210> 1376

<211> 45

<212> PRT

<213> Homo sapiens

<400> 1376

Ile Arg His Glu Glu Thr Leu Ser Pro Gly His Phe Lys Ser Ile Thr  
1 5 10 15

Gln Lys Lys Thr Leu Ile Phe Thr Phe Lys Ser His Met Gln Leu Leu  
20 25 30

Thr Leu Thr Ser Ala Val Ile Val Leu Ala Ile Ile Pro  
35 40 45

<210> 1377

<211> 230

<212> PRT

<213> Homo sapiens

<220>

<221> SITE



<222> (26)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (162)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1377

Ser	Pro	Ser	Gly	Ala	Pro	Gly	Arg	Pro	Gly	Leu	Arg	Arg	Arg	Arg	Arg
1				5					10					15	
Arg	Arg	Arg	Arg	Arg	Ala	Asp	His	Val	Xaa	Ala	Lys	Glu	Asn	Pro	Cys
			20					25						30	
Arg	Lys	Phe	Gln	Ala	Asn	Ile	Phe	Asn	Lys	Ser	Lys	Cys	Gln	Asn	Cys
		35					40						45		
Phe	Lys	Pro	Arg	Glu	Ser	His	Leu	Leu	Asn	Asp	Glu	Asp	Leu	Thr	Gln
	50					55					60				
Ala	Lys	Pro	Ile	Tyr	Gly	Gly	Trp	Leu	Leu	Leu	Ala	Pro	Asp	Gly	Thr
65					70					75					80
Asp	Phe	Asp	Asn	Pro	Val	His	Arg	Ser	Arg	Lys	Trp	Gln	Arg	Arg	Phe
				85					90						95
Phe	Ile	Leu	Tyr	Glu	His	Gly	Leu	Leu	Arg	Tyr	Ala	Leu	Asp	Glu	Met
		100						105					110		
Pro	Thr	Thr	Leu	Pro	Gln	Gly	Thr	Ile	Asn	Met	Asn	Gln	Cys	Thr	Asp
		115					120						125		
Val	Val	Asp	Gly	Glu	Gly	Arg	Thr	Gly	Gln	Lys	Phe	Ser	Leu	Cys	Ile
	130					135					140				
Leu	Thr	Pro	Glu	Lys	Glu	His	Phe	Ile	Arg	Ala	Glu	Thr	Lys	Glu	Ile
145				150						155					160
Val	Xaa	Gly	Trp	Leu	Glu	Met	Leu	Met	Val	Tyr	Pro	Arg	Thr	Asn	Lys
			165						170					175	
Gln	Asn	Gln	Lys	Lys	Lys	Arg	Lys	Val	Glu	Pro	Pro	Thr	Pro	Gln	Glu
		180						185					190		
Pro	Gly	Pro	Ala	Lys	Trp	Leu	Leu	Pro	Ala	Ala	Ala	Ala	Ala	Ala	Ala
		195					200					205			
Ala	Ala	Ala	Ala	Ser	Pro	Val	Leu	Arg	Lys	Ser	Pro	Pro	Pro	Ser	Pro
	210					215						220			

His Ser Gly Arg Lys Lys  
225 230

<210> 1378  
<211> 75  
<212> PRT  
<213> Homo sapiens

<400> 1378  
Gly Lys Gln Lys Pro Leu Ser Ser Ala Phe His Leu Gln Glu Arg Arg  
1 5 10 15  
Lys Asn Ser Cys Leu Leu Ser Val Ile Gln Phe Ala Cys Ile Leu Cys  
20 25 30  
Ser Cys Thr Asn Pro Tyr Arg Val Asn Leu Leu Ser Thr Ile Tyr Trp  
35 40 45  
Cys Leu Ile Glu Asn Asp Cys Leu Pro Ser Phe Leu Val Pro Phe Leu  
50 55 60  
Thr Val Leu Lys Tyr Leu Lys Cys Ile Asp Cys  
65 70 75

<210> 1379  
<211> 239  
<212> PRT  
<213> Homo sapiens  
  
<220>  
<221> SITE  
<222> (229)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (231)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (234)  
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1379  
Arg Arg Gly Gln Val Gly Ala Arg Ser Cys Cys Phe Trp Phe Ser Cys  
1 5 10 15

Gly Arg Arg Arg Cys Pro Ala Ala Leu Gly Cys Arg Thr Asp Lys Ala  
                   20                                  25                                  30  
 Trp Ala Thr Ala Pro Gln Lys Pro Thr Gln Leu Asp Ala Gly Ala Gly  
                   35                                  40                                  45  
 Arg Arg Val Gly Asp Arg Val Ser Glu Gly Ala Ala Arg Ala Gly Gly  
                   50                                  55                                  60  
 Arg Ala Pro Glu Gly Glu Arg Gly Gly Gly Gly Ser Ala Ala Gly  
                   65                                  70                                  75                                  80  
 Arg Ala Gly Arg Gly Met Ser Met Pro Asp Ala Met Pro Leu Pro Gly  
                                   85                                  90                                  95  
 Val Gly Glu Glu Leu Lys Gln Ala Lys Glu Ile Glu Asp Ala Glu Lys  
                                   100                                  105                                  110  
 Tyr Ser Phe Met Ala Thr Val Thr Lys Ala Pro Lys Lys Gln Ile Gln  
                   115                                  120                                  125  
 Phe Ala Asp Asp Met Gln Glu Phe Thr Lys Phe Pro Thr Lys Thr Gly  
                   130                                  135                                  140  
 Arg Arg Ser Leu Ser Arg Ser Ile Ser Gln Ser Ser Thr Asp Ser Tyr  
                   145                                  150                                  155                                  160  
 Ser Ser Ala Ala Ser Tyr Thr Asp Ser Ser Asp Asp Glu Val Ser Pro  
                                   165                                  170                                  175  
 Arg Glu Lys Gln Gln Thr Asn Ser Lys Gly Ser Ser Asn Phe Cys Val  
                   180                                  185                                  190  
 Lys Asn Ile Lys Gln Ala Glu Phe Gly Arg Arg Glu Ile Glu Ile Ala  
                   195                                  200                                  205  
 Glu Gln Asp Met Ser Ala Leu Ile Ser Leu Arg Lys Arg Ala Gln Gly  
                   210                                  215                                  220  
 Glu Lys Pro Leu Xaa Gly Xaa Lys Ile Xaa Gly Leu Thr His Tyr  
                   225                                  230                                  235

&lt;210&gt; 1380

&lt;211&gt; 97

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1380

Ser Cys Ala Asp Ile Val Ser Cys Val Ser Ala Val Ala Val Glu Glu  
 1 5 10 15

Leu Lys Leu Gly Lys Met Val Cys Ile Pro Cys Ile Val Ile Pro Val  
 20 25 30

Leu Leu Trp Ile Tyr Lys Lys Phe Leu Glu Pro Tyr Ile Tyr Pro Leu  
 35 40 45

Val Ser Pro Phe Val Ser Arg Ile Trp Pro Lys Lys Ala Ile Gln Glu  
 50 55 60

Ser Asn Asp Thr Asn Lys Gly Lys Val Asn Phe Lys Gly Ala Asp Met  
 65 70 75 80

Asn Gly Leu Pro Thr Lys Gly Pro Thr Glu Ile Cys Asp Lys Lys Lys  
 85 90 95

Asp

<210> 1381

<211> 618

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (507)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (524)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (562)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1381

Pro Arg Val Arg Pro Arg Val Arg Ser Ile Thr Met Ser Val Arg Tyr  
 1 5 10 15

Ser Ser Ser Lys His Tyr Ser Ser Ser Arg Ser Gly Gly Gly Gly Gly  
 20 25 30

Gly Gly Gly Cys Gly Gly Gly Gly Gly Val Ser Ser Leu Arg Ile Ser

35	40	45
Ser Ser Lys Gly Ser Leu Gly Gly Gly Phe Ser Ser Gly Gly Phe Ser		
50	55	60
Gly Gly Ser Phe Ser Arg Gly Ser Ser Gly Gly Gly Cys Phe Gly Gly		
65	70	75
Ser Ser Gly Gly Tyr Gly Gly Leu Gly Gly Phe Gly Gly Gly Ser Phe		
85	90	95
Arg Gly Ser Tyr Gly Ser Ser Ser Phe Gly Gly Ser Tyr Gly Gly Ser		
100	105	110
Phe Gly Gly Gly Ser Phe Gly Gly Gly Ser Phe Gly Gly Gly Ser Phe		
115	120	125
Gly Gly Gly Gly Phe Gly Gly Gly Gly Phe Gly Gly Gly Phe Gly Gly		
130	135	140
Gly Phe Gly Gly Asp Gly Gly Leu Leu Ser Gly Asn Glu Lys Val Thr		
145	150	155
Met Gln Asn Leu Asn Asp Arg Leu Ala Ser Tyr Leu Asp Lys Val Arg		
165	170	175
Ala Leu Glu Glu Ser Asn Tyr Glu Leu Glu Gly Lys Ile Lys Glu Trp		
180	185	190
Tyr Glu Lys His Gly Asn Ser His Gln Gly Glu Pro Arg Asp Tyr Ser		
195	200	205
Lys Tyr Tyr Lys Thr Ile Asp Asp Leu Lys Asn Gln Ile Leu Asn Leu		
210	215	220
Thr Thr Asp Asn Ala Asn Ile Leu Leu Gln Ile Asp Asn Ala Arg Leu		
225	230	235
Ala Ala Asp Asp Phe Arg Leu Lys Tyr Glu Asn Glu Val Ala Leu Arg		
245	250	255
Gln Ser Val Glu Ala Asp Ile Asn Gly Leu Arg Arg Val Leu Asp Glu		
260	265	270
Leu Thr Leu Thr Lys Ala Asp Leu Glu Met Gln Ile Glu Ser Leu Thr		
275	280	285
Glu Glu Leu Ala Tyr Leu Lys Lys Asn His Glu Glu Glu Met Lys Asp		
290	295	300
Leu Arg Asn Val Ser Thr Gly Asp Val Asn Val Glu Met Asn Ala Ala		

305                                      310                                      315                                      320  
 Pro Gly Val Asp Leu Thr Gln Leu Leu Asn Asn Met Arg Ser Gln Tyr  
    325                                      330                                      335  
 Glu Gln Leu Ala Glu Gln Asn Arg Lys Asp Ala Glu Ala Trp Phe Asn  
    340                                      345                                      350  
 Glu Lys Ser Lys Glu Leu Thr Thr Glu Ile Asp Asn Asn Ile Glu Gln  
    355                                      360                                      365  
 Ile Ser Ser Tyr Lys Ser Glu Ile Thr Glu Leu Arg Arg Asn Val Gln  
    370                                      375                                      380  
 Ala Leu Glu Ile Glu Leu Gln Ser Gln Leu Ala Leu Lys Gln Ser Leu  
 385                                      390                                      395                                      400  
 Glu Ala Ser Leu Ala Glu Thr Glu Gly Arg Tyr Cys Val Gln Leu Ser  
    405                                      410                                      415  
 Gln Ile Gln Ala Gln Ile Ser Ala Leu Glu Glu Gln Leu Gln Gln Ile  
    420                                      425                                      430  
 Arg Ala Glu Thr Glu Cys Gln Asn Thr Glu Tyr Gln Gln Leu Leu Asp  
    435                                      440                                      445  
 Ile Lys Ile Arg Leu Glu Asn Glu Ile Gln Thr Tyr Arg Ser Leu Leu  
    450                                      455                                      460  
 Glu Gly Glu Gly Ser Ser Gly Gly Gly Gly Arg Gly Gly Gly Ser Phe  
 465                                      470                                      475                                      480  
 Gly Gly Gly Tyr Gly Gly Gly Ser Ser Gly Gly Gly Ser Ser Gly Gly  
    485                                      490                                      495  
 Gly His Gly Gly Ser Ser Gly Gly Gly Tyr Xaa Gly Gly Ser Ser Gly  
    500                                      505                                      510  
 Gly Gly Ser Ser Gly Gly Gly Tyr Gly Gly Gly Xaa Pro Ala Ala Ala  
    515                                      520                                      525  
 Thr Ala Ala Val Pro Ala Ala Ala Thr Val Val Ala Val Pro Ala Ala  
    530                                      535                                      540  
 Ala Ala Ala Ala Thr Gly Ala Ala Leu Arg Arg Arg His Ser Ser Gly  
 545                                      550                                      555                                      560  
 Gly Xaa Tyr Gly Gly Gly Thr Ala Pro Ala Ala Asp Thr Ala Ala Ala  
    565                                      570                                      575  
 Gln Leu Arg Arg Arg Ile Arg Arg Arg His Ser Ser Gly Gly His Lys

580

585

590

Ser Ser Ser Ser Gly Ser Val Gly Glu Ser Ser Ser Lys Gly Pro Arg  
 595 600 605

Ser Ala Glu Thr Ser Trp Gly Asn Gln Asn  
 610 615

&lt;210&gt; 1382

&lt;211&gt; 500

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1382

Gln Ala Trp Ser Leu Gln Val Ala Leu Ser Pro Phe Phe Phe Pro Ala  
 1 5 10 15

Ser Pro Ser Asn Ser Phe Ala Ala Ala Val Pro Gln Leu Leu Phe Pro  
 20 25 30

Glu Leu Pro Leu Pro His Val Pro Gly Gln Glu Ser Ala Lys Arg Arg  
 35 40 45

Ser Ala Arg Arg Phe Leu Ile Met Ser Glu Leu Thr Lys Glu Leu Met  
 50 55 60

Glu Leu Val Trp Gly Thr Lys Ser Ser Pro Gly Leu Ser Asp Thr Ile  
 65 70 75 80

Phe Cys Arg Trp Thr Gln Gly Phe Val Phe Ser Glu Ser Glu Gly Ser  
 85 90 95

Ala Leu Glu Gln Phe Glu Gly Gly Pro Cys Ala Val Ile Ala Pro Val  
 100 105 110

Gln Ala Phe Leu Leu Lys Lys Leu Leu Phe Ser Ser Glu Lys Ser Ser  
 115 120 125

Trp Arg Asp Cys Ser Glu Glu Glu Gln Lys Glu Leu Leu Cys His Thr  
 130 135 140

Leu Cys Asp Ile Leu Glu Ser Ala Cys Cys Asp His Ser Gly Ser Tyr  
 145 150 155 160

Cys Leu Val Ser Trp Leu Arg Gly Lys Thr Thr Glu Glu Thr Ala Ser  
 165 170 175

Ile Ser Gly Ser Pro Ala Glu Ser Ser Cys Gln Val Glu His Ser Ser  
 180 185 190

Ala Leu Ala Val Glu Glu Leu Gly Phe Glu Arg Phe His Ala Leu Ile  
195 200 205

Gln Lys Arg Ser Phe Arg Ser Leu Pro Glu Leu Lys Asp Ala Val Leu  
210 215 220

Asp Gln Tyr Ser Met Trp Gly Asn Lys Phe Gly Val Leu Leu Phe Leu  
225 230 235 240

Tyr Ser Val Leu Leu Thr Lys Gly Ile Glu Asn Ile Lys Asn Glu Ile  
245 250 255

Glu Asp Ala Ser Glu Pro Leu Ile Asp Pro Val Tyr Gly His Gly Ser  
260 265 270

Gln Ser Leu Ile Asn Leu Leu Leu Thr Gly His Ala Val Ser Asn Val  
275 280 285

Trp Asp Gly Asp Arg Glu Cys Ser Gly Met Lys Leu Leu Gly Ile His  
290 295 300

Glu Gln Ala Ala Val Gly Phe Leu Thr Leu Met Glu Ala Leu Arg Tyr  
305 310 315 320

Cys Lys Val Gly Ser Tyr Leu Lys Ser Pro Lys Phe Pro Ile Trp Ile  
325 330 335

Val Gly Ser Glu Thr His Leu Thr Val Phe Phe Ala Lys Asp Met Ala  
340 345 350

Leu Val Ala Pro Glu Ala Pro Ser Glu Gln Ala Arg Arg Val Phe Gln  
355 360 365

Thr Tyr Asp Pro Glu Asp Asn Gly Phe Ile Pro Asp Ser Leu Leu Glu  
370 375 380

Asp Val Met Lys Ala Leu Asp Leu Val Ser Asp Pro Glu Tyr Ile Asn  
385 390 395 400

Leu Met Lys Asn Lys Leu Asp Pro Glu Gly Leu Gly Ile Ile Leu Leu  
405 410 415

Gly Pro Phe Leu Gln Glu Phe Phe Pro Asp Gln Gly Ser Ser Gly Pro  
420 425 430

Glu Ser Phe Thr Val Tyr His Tyr Asn Gly Leu Lys Gln Ser Asn Tyr  
435 440 445

Asn Glu Lys Val Met Tyr Val Glu Gly Thr Ala Val Val Met Gly Phe  
450 455 460



Glu Asp Pro Met Leu Gln Thr Asp Asp Thr Pro Ile Lys Arg Cys Leu  
 465 470 475 480

Gln Thr Lys Trp Pro Tyr Ile Glu Leu Leu Trp Thr Thr Asp Arg Ser  
 485 490 495

Pro Ser Leu Asn  
 500

<210> 1383  
 <211> 175  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (80)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (133)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 1383  
 Leu Cys Asp Ser Glu Glu Val Ala Trp Glu Leu Gly Glu Ala Gln Arg  
 1 5 10 15

Met Pro Pro Gly Glu Ser Pro His His Gln Cys Ile Thr Ser Asn Val  
 20 25 30

Pro Leu Glu Arg Pro Pro Leu Cys Ser Val Met Phe Gln Lys Leu Leu  
 35 40 45

Met Lys Gln His Val Leu Val Ala Cys Ala Leu Ala Cys His Asp Ser  
 50 55 60

Pro Leu Thr Gly Pro Pro Val Lys Ser Lys Gly Leu Pro Ala Ala Xaa  
 65 70 75 80

Ser Glu Ala Ser Ala Glu Ser Ser His Pro His Gly Ser Gly Glu Val  
 85 90 95

Ile Thr Leu Ser Arg Arg Ser Asp His Thr Ser Ser Ser Pro Arg Gly  
 100 105 110

Leu Leu Ile Leu Gly Asp Asp Ser Ser Glu His Leu Leu Gln Asp  
 115 120 125

Trp Ile Pro Pro Xaa Cys Arg Ser Trp Gly Leu Arg Ala Leu Glu Gln  
130 135 140

Pro Met Leu Glu Ser Cys Leu Pro Pro Ser Ala Thr Val Pro Tyr Pro  
145 150 155 160

Gly Thr Val Glu Trp Pro His Gly Gly Asp Gly Arg Pro Ala Glu  
165 170 175

<210> 1384  
<211> 57  
<212> PRT  
<213> Homo sapiens

<400> 1384  
Ser Gln Ser Pro Cys Lys Gln Asp Lys Ser Lys Gly Gly Leu Ala Cys  
1 5 10 15

Pro Ser Leu Phe His Thr Phe Leu Pro Gly Thr Glu Ser His Gly Glu  
20 25 30

Phe Lys Thr Pro Ser His Ile Leu Leu Lys Leu Val Gln Cys Thr  
35 40 45

Thr Ser Ser Glu Glu Tyr Arg Met Ala  
50 55

<210> 1385  
<211> 56  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (55)  
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1385  
Val Pro Gly Ser Gln Pro Leu Glu Thr Gly Ala Leu Arg Glu Asp Ser  
1 5 10 15

Leu Pro Pro Arg Ile Leu Leu His Pro Trp Phe Glu Ser Val Leu Glu  
20 25 30

Pro Gly Tyr Ile Asp Ser Glu Ile Gly Thr Ser Asp Gln Ile Val Pro  
35 40 45

Glu Tyr Gln Glu Asp Ser Xaa His  
50 55

<210> 1386

<211> 105

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (40)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1386

His Glu Leu Ala Ser Ser Glu Phe Ser His Glu Ala Val Lys Thr His  
1 5 10 15

Ile Asp Thr Val Ile Asn Ala Leu Lys Thr Glu Arg Asp Val Ser Val  
20 25 30

Arg Gln Arg Ala Ala Asp Leu Xaa Tyr Ala Met Cys Asp Arg Ser Asn  
35 40 45

Ala Lys Gln Ile Val Ser Glu Met Leu Arg Tyr Leu Glu Thr Ala Asp  
50 55 60

Tyr Ala Ile Arg Glu Glu Ile Val Leu Lys Val Ala Ile Leu Ala Glu  
65 70 75 80

Lys Tyr Ala Val Asp Tyr Ser Trp Tyr Val Asp Thr Ile Leu Asn Leu  
85 90 95

Ile Arg Ile Ala Gly Arg Leu Arg Glu  
100 105

<210> 1387

<211> 67

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (1)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (7)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (9)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1387

Xaa His Arg Gly Asn Gly Xaa Leu Xaa Val Pro Ser Glu Phe Pro Gly  
1 5 10 15

Arg Pro Thr Arg Pro Gly Lys Leu Asp Ile Val Met His Lys Met Gln  
20 25 30

Glu Lys Val Gln Ser Ile Asn Tyr Asn Pro Phe Asp Gln Lys Leu Tyr  
35 40 45

Val Tyr Asn Asp Gly Tyr Leu Leu Asn Tyr Asp Leu Ser Val Leu Gln  
50 55 60

Lys Pro Gln  
65

<210> 1388

<211> 345

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (297)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1388

Val Trp Met Thr Ser Thr Ser Ser Pro Val Pro Arg Ala His Cys Ser  
1 5 10 15

Asn Leu Thr Cys Asn Asn Ser Lys Asn Lys Thr Leu Val Thr Gln Asn  
20 25 30

Ser Gly Val Glu Ala Leu Ile His Ala Ile Leu Arg Ala Gly Asp Lys  
35 40 45

Asp Asp Ile Thr Glu Pro Ala Val Cys Ala Leu Arg His Leu Thr Ser  
50 55 60

Arg His Pro Glu Ala Glu Met Ala Gln Asn Ser Val Arg Leu Asn Tyr

65                                      70                                      75                                      80  
 Gly Ile Pro Ala Ile Val Lys Leu Leu Asn Gln Pro Asn Gln Trp Pro  
    85                                      90                                      95  
 Leu Val Lys Ala Thr Ile Gly Leu Ile Arg Asn Leu Ala Leu Cys Pro  
    100                                      105                                      110  
 Ala Asn His Ala Pro Leu Gln Glu Ala Ala Val Ile Pro Arg Leu Val  
    115                                      120                                      125  
 Gln Leu Leu Val Lys Ala His Gln Asp Ala Gln Arg His Val Ala Ala  
    130                                      135                                      140  
 Gly Thr Gln Gln Pro Tyr Thr Asp Gly Val Arg Met Glu Glu Ile Val  
 145                                      150                                      155                                      160  
 Glu Gly Cys Thr Gly Ala Leu His Ile Leu Ala Arg Asp Pro Met Asn  
    165                                      170                                      175  
 Arg Met Glu Ile Phe Arg Leu Asn Thr Ile Pro Leu Phe Val Gln Leu  
    180                                      185                                      190  
 Leu Tyr Ser Ser Val Glu Asn Ile Gln Arg Val Ala Ala Gly Val Leu  
    195                                      200                                      205  
 Cys Glu Leu Ala Gln Asp Lys Glu Ala Ala Asp Ala Ile Asp Ala Glu  
    210                                      215                                      220  
 Gly Ala Ser Ala Pro Leu Met Glu Leu Leu His Ser Arg Asn Glu Gly  
 225                                      230                                      235                                      240  
 Thr Ala Thr Tyr Ala Ala Ala Val Leu Phe Arg Ile Ser Glu Asp Lys  
    245                                      250                                      255  
 Asn Pro Asp Tyr Arg Lys Arg Val Ser Val Glu Leu Thr Asn Ser Leu  
    260                                      265                                      270  
 Phe Lys His Asp Pro Ala Ala Trp Glu Ala Ala Gln Ser Met Ile Pro  
    275                                      280                                      285  
 Ile Asn Glu Pro Tyr Gly Asp Asp Xaa Asp Ala Thr Tyr Arg Pro Met  
    290                                      295                                      300  
 Tyr Ser Ser Asp Val Pro Leu Asp Pro Leu Glu Met His Met Asp Met  
 305                                      310                                      315                                      320  
 Asp Gly Asp Tyr Pro Ile Asp Thr Tyr Ser Asp Gly Leu Arg Pro Pro  
    325                                      330                                      335  
 Tyr Pro Thr Ala Asp His Met Leu Ala

340

345

&lt;210&gt; 1389

&lt;211&gt; 64

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (17)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1389

Ser Leu Ile Cys Tyr Val Gln Ser Leu Lys Ala Thr Thr His Phe Phe  
1 5 10 15

Xaa Lys Val Asp Ala Phe Ser Ala Val Leu Glu Ser Val Phe Cys Phe  
20 25 30

Trp Gln Glu Ser Cys Lys Leu Cys Ile Leu Lys Gln Met Gln Lys Val  
35 40 45

Val Leu Cys Lys Thr Phe Val Phe Cys Leu Ser Gln Ile Asn Ile Leu  
50 55 60

&lt;210&gt; 1390

&lt;211&gt; 371

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1390

Pro Pro Arg Ala Leu Gly Ser Val Ala Met Glu Asn Gln Val Leu Thr  
1 5 10 15

Pro His Val Tyr Trp Ala Gln Arg His Arg Glu Leu Tyr Leu Arg Val  
20 25 30

Glu Leu Ser Asp Val Gln Asn Pro Ala Ile Ser Ile Thr Glu Asn Val  
35 40 45

Leu His Phe Lys Ala Gln Gly His Gly Ala Lys Gly Asp Asn Val Tyr  
50 55 60

Glu Phe His Leu Glu Phe Leu Asp Leu Val Lys Pro Glu Pro Val Tyr

65		70		75		80									
Lys	Leu	Thr	Gln	Arg	Gln	Val	Asn	Ile	Thr	Val	Gln	Lys	Lys	Val	Ser
			85						90					95	
Gln	Trp	Trp	Glu	Arg	Leu	Thr	Lys	Gln	Glu	Lys	Arg	Pro	Leu	Phe	Leu
			100					105					110		
Ala	Pro	Asp	Phe	Asp	Arg	Trp	Leu	Asp	Glu	Ser	Asp	Ala	Glu	Met	Glu
		115					120					125			
Leu	Arg	Ala	Lys	Glu	Glu	Glu	Arg	Leu	Asn	Lys	Leu	Arg	Leu	Glu	Ser
	130						135				140				
Glu	Gly	Ser	Pro	Glu	Thr	Leu	Thr	Asn	Leu	Arg	Lys	Gly	Tyr	Leu	Phe
145					150					155				160	
Met	Tyr	Asn	Leu	Val	Gln	Phe	Leu	Gly	Phe	Ser	Trp	Ile	Phe	Val	Asn
			165					170					175		
Leu	Thr	Val	Arg	Phe	Cys	Ile	Leu	Gly	Lys	Glu	Ser	Phe	Tyr	Asp	Thr
		180						185					190		
Phe	His	Thr	Val	Ala	Asp	Met	Met	Tyr	Phe	Cys	Gln	Met	Leu	Ala	Val
	195						200					205			
Val	Glu	Thr	Ile	Asn	Ala	Ala	Ile	Gly	Val	Thr	Thr	Ser	Pro	Val	Leu
	210					215					220				
Pro	Ser	Leu	Ile	Gln	Leu	Leu	Gly	Arg	Asn	Phe	Ile	Leu	Phe	Ile	Ile
225					230					235				240	
Phe	Gly	Thr	Met	Glu	Glu	Met	Gln	Asn	Lys	Ala	Val	Val	Phe	Phe	Val
			245						250				255		
Phe	Tyr	Leu	Trp	Ser	Ala	Ile	Glu	Ile	Phe	Arg	Tyr	Ser	Phe	Tyr	Met
		260						265					270		
Leu	Thr	Cys	Ile	Asp	Met	Asp	Trp	Lys	Val	Leu	Thr	Trp	Leu	Arg	Tyr
		275					280					285			
Thr	Leu	Trp	Ile	Pro	Leu	Tyr	Pro	Leu	Gly	Cys	Leu	Ala	Glu	Ala	Val
	290					295					300				
Ser	Val	Ile	Gln	Ser	Ile	Pro	Ile	Phe	Asn	Glu	Thr	Gly	Arg	Phe	Ser
305					310					315				320	
Phe	Thr	Leu	Pro	Tyr	Pro	Val	Lys	Ile	Lys	Val	Arg	Phe	Ser	Phe	Phe
			325						330					335	
Leu	Gln	Ile	Tyr	Leu	Ile	Met	Ile	Phe	Leu	Gly	Leu	Tyr	Ile	Asn	Phe

340 345 350  
 Arg His Leu Tyr Lys Gln Arg Arg Arg Arg Tyr Gly Gln Lys Lys Lys  
 355 360 365  
 Lys Ile His  
 370  
  
 <210> 1391  
 <211> 365  
 <212> PRT  
 <213> Homo sapiens  
  
 <220>  
 <221> SITE  
 <222> (28)  
 <223> Xaa equals any of the naturally occurring L-amino acids  
  
 <400> 1391  
 Ala Glu Val Asn Thr Val Lys Tyr Leu Lys Pro Ser Thr Ser Gln Ile  
 1 5 10 15  
 Met Lys Lys Leu Leu Leu Lys Phe Ser Ser Gln Xaa Lys Lys Lys Lys  
 20 25 30  
 Ile Lys Arg Glu Ile Lys Ile Leu Glu Asn Leu Arg Gly Gly Pro Asn  
 35 40 45  
 Ile Ile Thr Leu Ala Asp Ile Val Lys Asp Pro Val Ser Arg Thr Pro  
 50 55 60  
 Ala Leu Val Phe Glu His Val Asn Asn Thr Asp Phe Lys Gln Leu Tyr  
 65 70 75 80  
 Gln Thr Leu Thr Asp Tyr Asp Ile Arg Phe Tyr Met Tyr Glu Ile Leu  
 85 90 95  
 Lys Ala Leu Asp Tyr Cys His Ser Met Gly Ile Met His Arg Asp Val  
 100 105 110  
 Lys Pro His Asn Val Met Ile Asp His Glu His Arg Lys Leu Arg Leu  
 115 120 125  
 Ile Asp Trp Gly Leu Ala Glu Phe Tyr His Pro Gly Gln Glu Tyr Asn  
 130 135 140  
 Val Arg Val Ala Ser Arg Tyr Phe Lys Gly Pro Glu Leu Leu Val Asp  
 145 150 155 160



Tyr Gln Met Tyr Asp Tyr Ser Leu Asp Met Trp Ser Leu Gly Cys Met  
                     165                    170                    175  
 Leu Ala Ser Met Ile Phe Arg Lys Glu Pro Phe Phe His Gly His Asp  
                     180                    185                    190  
 Asn Tyr Asp Gln Leu Val Arg Ile Ala Lys Val Leu Gly Thr Glu Asp  
                     195                    200                    205  
 Leu Tyr Asp Tyr Ile Asp Lys Tyr Asn Ile Glu Leu Asp Pro Arg Phe  
                     210                    215                    220  
 Asn Asp Ile Leu Gly Arg His Ser Arg Lys Arg Trp Glu Arg Phe Val  
                     225                    230                    235                    240  
 His Ser Glu Asn Gln His Leu Val Ser Pro Glu Ala Leu Asp Phe Leu  
                     245                    250                    255  
 Asp Lys Leu Leu Arg Tyr Asp His Gln Ser Arg Leu Thr Ala Arg Glu  
                     260                    265                    270  
 Ala Met Glu His Pro Tyr Phe Tyr Thr Val Val Lys Asp Gln Ala Arg  
                     275                    280                    285  
 Met Gly Ser Ser Ser Met Pro Gly Gly Ser Thr Pro Val Ser Ser Ala  
                     290                    295                    300  
 Asn Met Met Ser Gly Ile Ser Ser Val Pro Thr Pro Ser Pro Leu Gly  
                     305                    310                    315                    320  
 Pro Leu Ala Gly Ser Pro Val Ile Ala Ala Ala Asn Pro Leu Gly Met  
                     325                    330                    335  
 Pro Val Gln Leu Pro Leu Ala Leu Ser Ser Asn Gly Pro Ile Cys Leu  
                     340                    345                    350  
 Leu Met Pro Glu Gln Arg Trp Gly Ser Pro Pro Ser Pro  
                     355                    360                    365

&lt;210&gt; 1392

&lt;211&gt; 276

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1392

Thr Met Ala Ala Ser Asp Thr Glu Arg Asp Gly Leu Ala Pro Glu Lys  
   1                    5                    10                    15

Thr Ser Pro Asp Arg Asp Lys Lys Lys Glu Gln Ser Glu Val Ser Val

20	25	30
Ser Pro Arg Ala Ser Lys His His Tyr Ser Arg Ser Arg Ser Arg Ser		
35	40	45
Arg Glu Arg Lys Arg Lys Ser Asp Asn Glu Gly Arg Lys His Arg Ser		
50	55	60
Arg Ser Arg Ser Lys Glu Gly Arg Arg His Glu Ser Lys Asp Lys Ser		
65	70	75
80		
Ser Lys Lys His Lys Ser Glu Glu His Asn Asp Lys Glu His Ser Ser		
85	90	95
Asp Lys Gly Arg Glu Arg Leu Asn Ser Ser Glu Asn Gly Glu Asp Arg		
100	105	110
His Lys Arg Lys Glu Arg Lys Ser Ser Arg Gly Arg Ser His Ser Arg		
115	120	125
Ser Arg Ser Arg Glu Arg Arg His Arg Ser Arg Ser Arg Glu Arg Lys		
130	135	140
Lys Ser Arg Ser Arg Ser Arg Glu Arg Lys Lys Ser Arg Ser Arg Ser		
145	150	155
160		
Arg Glu Arg Lys Lys Ser Arg Ser Arg Ser Arg Glu Arg Lys Arg Arg		
165	170	175
Ile Arg Ser Arg Ser Arg Ser Arg Ser Arg His Arg His Arg Thr Arg		
180	185	190
Ser Arg Ser Arg Thr Arg Ser Arg Ser Arg Asp Arg Lys Lys Arg Ile		
195	200	205
Glu Lys Pro Arg Arg Phe Ser Arg Ser Leu Ser Arg Thr Pro Ser Pro		
210	215	220
Pro Pro Phe Arg Gly Arg Asn Thr Ala Met Asp Ala Gln Glu Ala Leu		
225	230	235
240		
Ala Arg Arg Glu Arg Pro Gly Val Ser Leu Ile Val Cys Pro Gly Trp		
245	250	255
Val Thr Gln Cys Asn Leu Met Leu Leu Pro Leu Gly Thr Gln Pro Asp		
260	265	270
Arg Lys Leu Gln		
275		

<210> 1393  
<211> 180  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (4)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (139)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (172)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (180)  
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1393  
Ala Arg Arg Xaa Val Val Ile Thr Ser Lys Ser Gly Glu Ile Leu Tyr  
1 5 10 15  
Arg Ile Ser Pro Trp Ala Lys Tyr Val Val Arg Glu Gly Asp Asn Val  
20 25 30  
Asn Tyr Asp Trp Ile His Trp Asp Pro Glu His Ser Tyr Glu Phe Lys  
35 40 45  
His Ser Arg Pro Lys Lys Pro Arg Ser Leu Arg Ile Tyr Glu Ser His  
50 55 60  
Val Gly Ile Ser Ser His Glu Gly Lys Val Ala Ser Tyr Lys His Phe  
65 70 75 80  
Thr Cys Asn Val Leu Pro Arg Ile Lys Gly Leu Gly Tyr Asn Cys Ile  
85 90 95  
Gln Leu Met Ala Ile Met Glu His Ala Tyr Tyr Ala Ser Phe Gly Tyr  
100 105 110  
Gln Ile Thr Ser Phe Phe Ala Ala Ser Ser Arg Tyr Gly Thr Pro Glu  
115 120 125

Glu Leu Gln Glu Leu Val Asp Thr Ala His Xaa Met Gly Ile Ile Val  
 130 135 140

Leu Leu Asp Val Val Gln Ala His Ala Ser Lys Asn Ser Ser Arg Trp  
 145 150 155 160

Asp Trp Asn Met Val Trp Met Gly Asp Arg Phe Xaa Val Asn Phe Pro  
 165 170 175

Phe Leu Gly Xaa  
 180

<210> 1394

<211> 162

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (64)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1394

Ile Leu Thr Tyr Lys Glu Thr Gly Pro Gln Thr Gly Asn Ser Leu Val  
 1 5 10 15

Gln Ala Ser Ala Arg Arg Lys Asp Thr Met Thr Ala Pro Cys Trp Ala  
 20 25 30

Gln Pro Gly Ser Leu Ala Lys Cys Leu Leu Glu Ala Val Pro Ala Arg  
 35 40 45

Gly Leu Gln Gln Gly Asp Ser Leu Pro Ser Gly His Tyr Gln Tyr Xaa  
 50 55 60

Leu Tyr Leu Glu Val Gly Lys Arg Ser Pro Leu Arg Gln Gln Asp Asn  
 65 70 75 80

Gly Gln Phe Arg Glu Gly Glu Gly Ser Lys Arg Phe Arg Gly His Arg  
 85 90 95

Ser Gln Arg Thr Pro Pro Arg Pro Thr Ala Gly Ser Ala Trp Lys Ile  
 100 105 110

His Leu Leu Gly Thr Phe Trp Gln Pro Asp Gly Ser Asn Ser Pro Leu  
 115 120 125

Gly Leu Ile Pro Ser Ser Lys Ser Trp Leu Gln Met Ser Leu Ser Ser  
 130 135 140

Pro Tyr Trp Arg Ala Pro Pro Asp Ser Trp Ala Gln Phe Ile Ser Ser  
145 150 155 160

Pro Phe

<210> 1395

<211> 416

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (412)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (413)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1395

Gln Leu Asp Gly Val Gly Leu Glu Ser Arg Ser Pro Gly Cys Ser Thr  
1 5 10 15

Trp Glu Lys Ala Asp Arg Val Arg Gly Pro Val Ala Gln Arg Ala Val  
20 25 30

Ala Ser Gly Ser Gly Lys Trp Arg Gln Glu Pro Ser Leu His Phe Ala  
35 40 45

Met Ser Phe Leu Ile Asp Ser Ser Ile Met Ile Thr Ser Gln Ile Leu  
50 55 60

Phe Phe Gly Phe Gly Trp Leu Phe Phe Met Arg Gln Leu Phe Lys Asp  
65 70 75 80

Tyr Glu Ile Arg Gln Tyr Val Val Gln Val Ile Phe Ser Val Thr Phe  
85 90 95

Ala Phe Ser Cys Thr Met Phe Glu Leu Ile Ile Phe Glu Ile Leu Gly  
100 105 110

Val Leu Asn Ser Ser Ser Arg Tyr Phe His Trp Lys Met Asn Leu Cys  
115 120 125

Val Ile Leu Leu Ile Leu Val Phe Met Val Pro Phe Tyr Ile Gly Tyr  
130 135 140

Phe Ile Val Ser Asn Ile Arg Leu Leu His Lys Gln Arg Leu Leu Phe  
 145 150 155 160

Ser Cys Leu Leu Trp Leu Thr Phe Met Tyr Phe Phe Trp Lys Leu Gly  
 165 170 175

Asp Pro Phe Pro Ile Leu Ser Pro Lys His Gly Ile Leu Ser Ile Glu  
 180 185 190

Gln Leu Ile Ser Arg Val Gly Val Ile Gly Val Thr Leu Met Ala Leu  
 195 200 205

Leu Ser Gly Phe Gly Ala Val Asn Cys Pro Tyr Thr Tyr Met Ser Tyr  
 210 215 220

Phe Leu Arg Asn Val Thr Asp Thr Asp Ile Leu Ala Leu Glu Arg Arg  
 225 230 235 240

Leu Leu Gln Thr Met Asp Met Ile Ile Ser Lys Lys Lys Arg Met Ala  
 245 250 255

Met Ala Arg Arg Thr Met Phe Gln Lys Gly Glu Val His Asn Lys Pro  
 260 265 270

Ser Gly Phe Trp Gly Met Ile Lys Ser Val Thr Thr Ser Ala Ser Gly  
 275 280 285

Ser Glu Asn Leu Thr Leu Ile Gln Gln Glu Val Asp Ala Leu Glu Glu  
 290 295 300

Leu Ser Arg Gln Leu Phe Leu Glu Thr Ala Asp Leu Tyr Ala Thr Lys  
 305 310 315 320

Glu Arg Ile Glu Tyr Ser Lys Thr Phe Lys Gly Lys Tyr Phe Asn Phe  
 325 330 335

Leu Gly Tyr Phe Phe Ser Ile Tyr Cys Val Trp Lys Ile Phe Met Ala  
 340 345 350

Thr Ile Asn Ile Val Phe Asp Arg Val Gly Lys Thr Asp Pro Val Thr  
 355 360 365

Arg Gly Ile Glu Ile Thr Val Asn Tyr Leu Gly Ile Gln Phe Asp Val  
 370 375 380

Lys Phe Trp Ser Gln His Ile Ser Phe Ile Leu Val Gly Ile Ile Ile  
 385 390 395 400

Val Thr Ser Ile Arg Gly Leu Leu Ile Thr Leu Xaa Xaa Val Ile Leu  
 405 410 415

<210> 1396  
<211> 71  
<212> PRT  
<213> Homo sapiens

<400> 1396  
Ile Ile Tyr Val His Ile Val Gln Gln Lys Tyr Asn Val Asn His Asn  
1 5 10 15  
Ile Ile Phe Asn Phe Leu Val Ala Ile Leu Lys Lys Lys Gln Ala Lys  
20 25 30  
Leu Ile Leu Ile Thr Val Tyr Val Thr Gln Tyr Ile Lys Asn Ile Ile  
35 40 45  
Ser Thr Cys Asn Gln Tyr Lys Arg Leu Leu Met Lys His Leu Ile Phe  
50 55 60  
Phe Phe Phe His Thr Lys Ser  
65 70

<210> 1397  
<211> 204  
<212> PRT  
<213> Homo sapiens

<400> 1397  
Ala Pro Arg Leu Val Val Thr Cys Arg His Val Ser Pro Arg Glu Ala  
1 5 10 15  
Ala Arg Val Leu Val Arg Ser Thr Thr Pro Lys Ser Val Ala Ile Trp  
20 25 30  
Gly Arg Val Val Phe Ala Thr Gln Glu Thr Cys Pro Tyr Asp Ile Ala  
35 40 45  
Val Val Ser Leu Glu Glu Asp Leu Asp Asp Val Pro Ile Pro Val Pro  
50 55 60  
Ala Glu His Phe His Glu Gly Glu Ala Val Ser Val Val Gly Phe Gly  
65 70 75 80  
Val Phe Gly Gln Ser Cys Gly Pro Ser Val Thr Ser Gly Ile Leu Ser

	85		90		95
Ala Val Val Gln Val Asn Gly Thr Pro Val Met Leu Gln Thr Thr Cys					
100		105		110	
Ala Val His Ser Gly Ser Ser Gly Gly Pro Leu Phe Ser Asn His Ser					
115		120		125	
Gly Asn Leu Leu Gly Ile Ile Thr Ser Asn Thr Arg Asp Asn Asn Thr					
130		135		140	
Gly Ala Thr Tyr Pro His Leu Asn Phe Ser Ile Pro Ile Thr Val Leu					
145		150		155	160
Gln Pro Ala Leu Gln Gln Tyr Ser Gln Thr Gln Asp Leu Gly Gly Leu					
165		170		175	
Arg Glu Leu Asp Arg Ala Ala Glu Pro Val Arg Val Val Trp Arg Leu					
180		185		190	
Gln Arg Pro Leu Ala Glu Ala Pro Arg Ser Lys Leu					
195		200			

&lt;210&gt; 1398

&lt;211&gt; 69

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (19)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1398

Val Phe Ile Val Phe Asn Ser Val Thr Ser Arg Phe Phe Pro Lys Lys					
1		5		10	15
Phe Leu Xaa Ile Lys Ser Arg Leu Phe Arg Lys Tyr Leu Pro Val Leu					
20		25		30	
His Phe Asn Phe Thr Asn Gln Thr Thr Ala Ile Gln Pro Ile Lys Gln					
35		40		45	
Gln Lys Gln Ser Lys Glu Arg Asp Leu Asp Ile Gly Ile Lys Glu Ser					
50		55		60	
Phe His Phe Ile Ile					
65					



<210> 1399  
<211> 238  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (18)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (57)  
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1399  
Glu Ala Glu Ala Ala Glu Arg Gly Pro Leu His Ala Gly Lys Gln Pro  
1 5 10 15  
Arg Xaa Pro Gly Gly Gly Ala Arg Trp Pro Cys Cys Ser Ala Phe Lys  
20 25 30  
Glu Gln Gln Phe Val Ile Ala Gly Val Leu Val Glu Asp Ser Asn Asn  
35 40 45  
His His Leu Met Leu Glu Ala Ser Xaa Trp Ala Thr Ile Glu Gly Leu  
50 55 60  
Val Glu Leu Leu Gln Pro Phe Lys Gln Val Ala Glu Met Leu Ser Ala  
65 70 75 80  
Ser Arg Tyr Pro Thr Ile Ser Met Val Lys Pro Leu Leu His Met Leu  
85 90 95  
Leu Asn Thr Thr Leu Asn Ile Lys Glu Thr Asp Ser Lys Glu Leu Ser  
100 105 110  
Met Ala Lys Glu Val Ile Ala Lys Glu Leu Ser Lys Thr Tyr Gln Glu  
115 120 125  
Thr Pro Glu Ile Asp Met Phe Leu Asn Val Ala Thr Phe Leu Asp Pro  
130 135 140  
Arg Tyr Lys Arg Leu Pro Phe Leu Ser Ala Phe Glu Arg Gln Gln Val  
145 150 155 160  
Glu Asn Arg Val Val Glu Glu Ala Lys Gly Cys Trp Thr Arg Ser Lys  
165 170 175

Thr Ala Ala Thr Gly Arg Leu Arg Thr Arg Ser Ser Arg Cys Pro Arg  
                   180                  185                  190

Ser Leu Pro Ser Arg Ser Ser Cys Gly His Pro Arg Arg Arg Pro Pro  
                   195                  200                  205

Ala Ser Ser Thr Thr Cys Trp Pro Arg Ser Ser Ala Arg Gln Ala Ala  
                   210                  215                  220

Trp Arg Thr Arg Lys Ser Gly Met Pro Arg Trp Trp Arg Ser  
                   225                  230                  235

&lt;210&gt; 1400

&lt;211&gt; 83

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (83)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1400

Phe Leu Lys Leu Cys Gly Leu Lys Trp Gln Val Ala Ser Thr Asp Phe  
       1                  5                  10                  15

Thr Arg Phe Lys Leu Ile Phe Lys Ser Asn His Trp Arg Asn Arg Tyr  
                   20                  25                  30

Thr Phe Val Cys Arg Ile Phe Thr Ser Tyr Asn Ser Thr Arg Lys Val  
                   35                  40                  45

Phe Ser Phe Pro Ala Asp Ala Gly Thr Pro Thr Gly Thr Leu Gln Lys  
                   50                  55                  60

Asp Ala Ser Pro Asp Cys Thr Asp Gly Arg Trp Lys His Gly Pro Val  
       65                  70                  75                  80

Cys Gly Xaa

&lt;210&gt; 1401

&lt;211&gt; 79

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1401

Gly Ala Leu Cys Ala Val Trp Ala Arg Ala Gly Arg Pro Gly Pro Gln  
1 5 10 15

Asp Val Arg Cys Pro Leu Arg Arg Ala Gly Ala Cys Gly Glu Thr Arg  
20 25 30

Ala Thr Cys Glu Arg Gly Pro Glu Thr Phe Cys Thr Arg Glu Leu Arg  
35 40 45

Gly Leu Ser Asn Pro Ala Ser Val Gly Asn Val Ser Glu Thr Gln Gly  
50 55 60

Glu Trp Pro Gln Pro Phe Val Thr Cys Ser Pro Ala Cys Pro Lys  
65 70 75

<210> 1402

<211> 222

<212> PRT

<213> Homo sapiens

<400> 1402

Pro Ala Asn Gly Leu Leu Phe Gly Gly Leu Arg Ser Arg Glu Leu Arg  
1 5 10 15

Val Phe Ala Arg Leu Ser Thr Phe Arg Lys Ile Arg Ala Gly Val Trp  
20 25 30

Glu Val Pro His Ser Thr Gly Gln Arg Pro Leu Asp Ser Arg Gly Asn  
35 40 45

Leu Gln Leu Trp Val Arg Gly His Leu Ala Leu Val Phe Ala Leu Tyr  
50 55 60

Arg Ser Cys Gly Pro Arg Gly Ala Ser Gly Glu Asp Val Ser Gly Arg  
65 70 75 80

Gly Phe Pro Ala Phe Cys Leu Gly Gln Trp Gly Cys Ser Cys Leu Ser  
85 90 95

Phe Ser Pro Thr Pro Trp Thr Val Leu Gly Cys Trp Cys Thr Trp Leu  
100 105 110

Ala His Gly Gly Gln Arg Ala Glu Asn Ala Thr Ala Trp Leu Leu Val  
115 120 125

Pro Phe Asp Gln Glu Thr Gln Glu Glu Thr Pro Gln Ser Ala Glu Arg  
130 135 140

Pro Pro Gly Ser Leu Ala His Ser Arg Ser Gly Arg Asp Gly Arg Val

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<400> 1403
Arg Ala Thr Leu Glu His Pro Ala Leu Val Pro Leu Gln Pro Ala Glu
  1                      5                      10                      15
Met Val Glu Leu Met Phe Pro Leu Leu Leu Leu Leu Leu Pro Phe Leu
          20                      25                      30
Leu Tyr Met Ala Ala Pro Gln Ile Arg Lys Met Leu Ser Ser Gly Val
          35                      40                      45
Cys Thr Ser Thr Val Gln Leu Pro Gly Lys Val Val Val Val Thr Gly
          50                      55                      60
Ala Asn Thr Gly Ile Gly Lys Glu Thr Ala Lys Glu Leu Ala Gln Arg
  65                      70                      75                      80
Gly Ala Arg Val Tyr Leu Ala Cys Arg Asp Val Glu Lys Gly Glu Leu
          85                      90                      95
Val Ala Lys Glu Ile Gln Thr Thr Thr Gly Asn Gln Gln Val Leu Val
          100                      105                      110
Arg Lys Leu Asp Leu Ser Asp Thr Lys Ser Ile Arg Ala Xaa Ala Lys
          115                      120                      125

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Gly Phe Leu Ala Glu Glu Lys His Leu His Val  
 130 135

<210> 1404

<211> 285

<212> PRT

<213> Homo sapiens

<400> 1404

Glu Glu Gln His Ser Met Leu Gly Ser Gly Phe Lys Ala Glu Arg Leu  
 1 5 10 15

Arg Val Asn Leu Arg Leu Val Ile Asn Arg Leu Lys Leu Leu Glu Lys  
 20 25 30

Lys Lys Thr Glu Leu Ala Gln Lys Ala Arg Lys Glu Ile Ala Asp Tyr  
 35 40 45

Leu Ala Ala Gly Lys Asp Glu Arg Ala Arg Ile Arg Val Glu His Ile  
 50 55 60

Ile Arg Glu Asp Tyr Leu Val Glu Ala Met Glu Ile Leu Glu Leu Tyr  
 65 70 75 80

Cys Asp Leu Leu Leu Ala Arg Phe Gly Leu Ile Gln Ser Met Lys Glu  
 85 90 95

Leu Asp Ser Gly Leu Ala Glu Ser Val Ser Thr Leu Ile Trp Ala Ala  
 100 105 110

Pro Arg Leu Gln Ser Glu Val Ala Glu Leu Lys Ile Val Ala Asp Gln  
 115 120 125

Leu Cys Ala Lys Tyr Ser Lys Glu Tyr Gly Lys Leu Cys Arg Thr Asn  
 130 135 140

Gln Ile Gly Thr Val Asn Asp Arg Leu Met His Lys Leu Ser Val Glu  
 145 150 155 160

Ala Pro Pro Lys Ile Leu Val Glu Arg Tyr Leu Ile Glu Ile Ala Lys  
 165 170 175

Asn Tyr Asn Val Pro Tyr Glu Pro Asp Ser Val Val Met Ala Glu Ala  
 180 185 190

Pro Pro Gly Val Glu Thr Asp Leu Ile Asp Val Gly Phe Thr Asp Asp  
 195 200 205

Val Lys Lys Gly Gly Pro Gly Arg Gly Gly Ser Gly Gly Phe Thr Ala

210

215

220

Pro Val Gly Gly Pro Asp Gly Thr Val Pro Asp Ala His Ala His Ala  
 225 230 235 240

Tyr Ala Ile Cys Lys Tyr Ala Phe Leu Ile Ser Thr Ala Lys Gly Thr  
 245 250 255

Ile Arg Phe Gln Trp Thr Ala Asn Gly Asp Leu Ser Gly Leu Ser Gln  
 260 265 270

Tyr Ser Ser Thr Ser Asp Thr Ser Asn Ser Pro Ile Val  
 275 280 285

&lt;210&gt; 1405

&lt;211&gt; 196

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (113)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1405

Arg Val Thr Phe Asn Asn Leu Ser Ile Ser Gly Glu Leu Glu Ala Val  
 1 5 10 15

Gln Asn Met Val Ser Thr Val Glu Cys Ala Leu Lys His Val Ser Asp  
 20 25 30

Trp Leu Asp Glu Thr Asn Lys Gly Thr Lys Thr Glu Gly Glu Thr Glu  
 35 40 45

Val Lys Lys Asp Glu Ala Gly Glu Asn Tyr Ser Lys Asp Gln Gly Gly  
 50 55 60

Arg Thr Leu Cys Gly Val Met Arg Ile Gly Leu Val Ala Lys Gly Leu  
 65 70 75 80

Leu Ile Lys Asp Asp Met Asp Leu Glu Leu Val Leu Met Cys Lys Asp  
 85 90 95

Lys Pro Thr Glu Thr Leu Leu Asn Thr Val Lys Asp Asn Leu Pro Ile  
 100 105 110

Xaa Ile Gln Lys Leu Thr Glu Glu Lys Tyr Gln Val Glu Gln Cys Val  
 115 120 125

Asn Glu Ala Ser Ile Ile Ile Arg Asn Thr Lys Glu Pro Thr Leu Thr  
 130 135 140

Leu Lys Val Ile Leu Thr Ser Pro Leu Ile Arg Asp Glu Leu Glu Lys  
 145 150 155 160

Lys Asp Gly Glu Asn Val Ser Met Lys Asp Pro Pro Asp Leu Leu Asp  
 165 170 175

Arg Gln Lys Cys Leu Asn Ala Leu Ala Ser Leu Arg His Ala Lys Trp  
 180 185 190

Phe Gln Ala Arg  
 195

<210> 1406

<211> 329

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (312)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1406

Pro Pro Arg Pro Leu Ser Ala Arg Lys Leu Trp Pro Pro Leu Pro Pro  
 1 5 10 15

Pro Pro Thr Arg Thr Pro Ala Glu Pro Pro Arg Pro Arg Gly Arg Asn  
 20 25 30

Pro Ala Ser Asn Asn Ser Asn Ser Leu Asn Val Asn Asn Gly Val Pro  
 35 40 45

Gly Gly Ala Ala Ala Ala Ser Ser Ala Thr Val Ala Ala Ala Ser Ala  
 50 55 60

Thr Thr Ala Ala Ser Ser Ser Leu Ala Thr Pro Glu Leu Gly Ser Ser  
 65 70 75 80

Leu Lys Lys Lys Lys Arg Leu Ser Gln Ser Asp Glu Asp Val Ile Arg  
 85 90 95

Leu Ile Gly Gln His Leu Asn Gly Leu Gly Leu Asn Gln Thr Val Asp  
 100 105 110

Leu Leu Met Gln Glu Ser Gly Cys Arg Leu Glu His Pro Ser Ala Thr  
 115 120 125

Lys Phe Arg Asn His Val Met Glu Gly Asp Trp Asp Lys Ala Glu Asn  
 130 135 140  
 Asp Leu Asn Glu Leu Lys Pro Leu Val His Ser Pro His Ala Ile Val  
 145 150 155 160  
 Val Arg Gly Ala Leu Glu Ile Ser Gln Thr Leu Leu Gly Ile Ile Val  
 165 170 175  
 Arg Met Lys Phe Leu Leu Leu Gln Gln Lys Tyr Leu Glu Tyr Leu Glu  
 180 185 190  
 Asp Gly Lys Val Leu Glu Ala Leu Gln Val Leu Arg Cys Glu Leu Thr  
 195 200 205  
 Pro Leu Lys Tyr Asn Thr Glu Arg Ile His Val Leu Ser Gly Tyr Leu  
 210 215 220  
 Met Cys Ser His Ala Glu Asp Leu Arg Ala Lys Ala Glu Trp Glu Gly  
 225 230 235 240  
 Lys Gly Thr Ala Ser Arg Ser Lys Leu Leu Asp Lys Leu Gln Thr Tyr  
 245 250 255  
 Leu Pro Pro Ser Val Met Leu Pro Pro Arg Arg Leu Gln Thr Leu Leu  
 260 265 270  
 Arg Gln Ala Val Glu Leu Gln Arg Asp Arg Cys Leu Tyr His Asn Thr  
 275 280 285  
 Lys Leu Asp Asn Asn Leu Asp Ser Val Ser Leu Leu Ile Asp His Val  
 290 295 300  
 Cys Ser Lys Arg Gln Phe Pro Xaa Leu Tyr Ala Ala Asp Thr Tyr Gly  
 305 310 315 320  
 Ser Ile Val Met Asn Phe Gly Ser Cys  
 325

&lt;210&gt; 1407

&lt;211&gt; 713

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (9)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids



<220>  
<221> SITE  
<222> (10)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (134)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (280)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (282)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (322)  
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1407  
Ser Pro Gly Pro Gln Pro His Ser Xaa Xaa Arg Ser Pro Pro Pro Pro  
1 5 10 15  
Pro Leu Arg Pro Pro Pro Met Lys Arg Leu Pro Leu Leu Val Val Phe  
20 25 30  
Ser Thr Leu Leu Asn Cys Ser Tyr Thr Gln Asn Cys Thr Lys Thr Pro  
35 40 45  
Cys Leu Pro Asn Ala Lys Cys Glu Ile Arg Asn Gly Ile Glu Ala Cys  
50 55 60  
Tyr Cys Asn Met Gly Phe Ser Gly Asn Gly Val Thr Ile Cys Glu Asp  
65 70 75 80  
Asp Asn Glu Cys Gly Asn Leu Thr Gln Ser Cys Gly Glu Asn Ala Asn  
85 90 95  
Cys Thr Asn Thr Glu Gly Ser Tyr Tyr Cys Met Cys Val Pro Gly Phe  
100 105 110  
Arg Ser Ser Ser Asn Gln Asp Arg Phe Ile Thr Asn Asp Gly Thr Val  
115 120 125

Cys Ile Glu Asn Val Xaa Ala Asn Cys His Leu Asp Asn Val Cys Ile  
130 135 140

Ala Ala Asn Ile Asn Lys Thr Leu Thr Lys Ile Arg Ser Ile Lys Glu  
145 150 155 160

Pro Val Ala Leu Leu Gln Glu Val Tyr Arg Asn Ser Val Thr Asp Leu  
165 170 175

Ser Pro Thr Asp Ile Ile Thr Tyr Ile Glu Ile Leu Ala Glu Ser Ser  
180 185 190

Ser Leu Leu Gly Tyr Lys Asn Asn Thr Ile Ser Ala Lys Asp Thr Leu  
195 200 205

Ser Asn Ser Thr Leu Thr Glu Phe Val Lys Thr Val Asn Asn Phe Val  
210 215 220

Gln Arg Asp Thr Phe Val val Trp Asp Lys Leu Ser Val Asn His Arg  
225 230 235 240

Arg Thr His Leu Thr Lys Leu Met His Thr Val Glu Gln Ala Thr Leu  
245 250 255

Arg Ile Ser Gln Ser Phe Gln Lys Thr Thr Glu Phe Asp Thr Asn Ser  
260 265 270

Thr Asp Ile Ala Leu Lys Val Xaa Phe Xaa Asp Ser Tyr Asn Met Lys  
275 280 285

His Ile His Pro His Met Asn Met Asp Gly Asp Tyr Ile Asn Ile Phe  
290 295 300

Pro Lys Arg Lys Ala Ala Tyr Asp Ser Asn Gly Asn Val Ala Val Ala  
305 310 315 320

Phe Xaa Tyr Tyr Lys Ser Ile Gly Pro Leu Leu Ser Ser Ser Asp Asn  
325 330 335

Phe Leu Leu Lys Pro Gln Asn Tyr Asp Asn Ser Glu Glu Glu Arg  
340 345 350

Val Ile Ser Ser Val Ile Ser Val Ser Met Ser Ser Asn Pro Pro Thr  
355 360 365

Leu Tyr Glu Leu Glu Lys Ile Thr Phe Thr Leu Ser His Arg Lys Val  
370 375 380

Thr Asp Arg Tyr Arg Ser Leu Cys Ala Phe Trp Asn Tyr Ser Pro Asp  
385 390 395 400

Thr Met Asn Gly Ser Trp Ser Ser Glu Gly Cys Glu Leu Thr Tyr Ser  
405 410 415

Asn Glu Thr His Thr Ser Cys Arg Cys Asn His Leu Thr His Phe Ala  
420 425 430

Ile Leu Met Ser Ser Gly Pro Ser Ile Gly Ile Lys Asp Tyr Asn Ile  
435 440 445

Leu Thr Arg Ile Thr Gln Leu Gly Ile Ile Ile Ser Leu Ile Cys Leu  
450 455 460

Ala Ile Cys Ile Phe Thr Phe Trp Phe Phe Ser Glu Ile Gln Ser Thr  
465 470 475 480

Arg Thr Thr Ile His Lys Asn Leu Cys Cys Ser Leu Phe Leu Ala Glu  
485 490 495

Leu Val Phe Leu Val Gly Ile Asn Thr Asn Thr Asn Lys Leu Phe Cys  
500 505 510

Ser Ile Ile Ala Gly Leu Leu His Tyr Phe Phe Leu Ala Ala Phe Ala  
515 520 525

Trp Met Cys Ile Glu Gly Ile His Leu Tyr Leu Ile Val Val Gly Val  
530 535 540

Ile Tyr Asn Lys Gly Phe Leu His Lys Asn Phe Tyr Ile Phe Gly Tyr  
545 550 555 560

Leu Ser Pro Ala Val Val Val Gly Phe Ser Ala Ala Leu Gly Tyr Arg  
565 570 575

Tyr Tyr Gly Thr Thr Lys Val Cys Trp Leu Ser Thr Glu Asn Asn Phe  
580 585 590

Ile Trp Ser Phe Ile Gly Pro Ala Cys Leu Ile Ile Leu Val Asn Leu  
595 600 605

Leu Ala Phe Gly Val Ile Ile Tyr Lys Val Phe Arg His Thr Ala Gly  
610 615 620

Leu Lys Pro Glu Val Ser Cys Phe Glu Asn Ile Arg Ser Cys Ala Arg  
625 630 635 640

Gly Ala Leu Ala Leu Leu Phe Leu Leu Gly Thr Thr Trp Ile Phe Gly  
645 650 655

Val Leu His Val Val His Ala Ser Val Val Thr Ala Tyr Leu Phe Thr  
660 665 670

Val Ser Asn Ala Phe Gln Gly Met Phe Ile Phe Leu Phe Leu Cys Val  
 675 680 685

Leu Ser Arg Lys Ile Gln Glu Glu Tyr Tyr Arg Leu Phe Lys Asn Val  
 690 695 700

Pro Cys Cys Phe Gly Cys Leu Ser Cys  
 705 710

<210> 1408

<211> 336

<212> PRT

<213> Homo sapiens

<400> 1408

Gln Arg Gly His Gln Gly Cys Arg Arg Ala Arg Asn Cys Arg Val Gln  
 1 5 10 15

His Pro Val Cys Ser Arg Gly Arg Asp Ser Gly Leu Tyr His Leu Pro  
 20 25 30

His Pro Gln Pro Val Pro Glu Asn Thr Trp Leu Tyr Gln Ala Leu Arg  
 35 40 45

Glu Gly Thr Arg Val Gln Ser Val Glu Gln Ile Arg Glu Val Ala Ser  
 50 55 60

Gly Ala Ala Arg Ile Arg Gly Glu Thr Leu Gly Leu Ile Gly Phe Gly  
 65 70 75 80

Arg Thr Gly Gln Ala Val Ala Val Arg Ala Lys Ala Phe Gly Phe Ser  
 85 90 95

Val Ile Phe Tyr Asp Pro Tyr Leu Gln Asp Gly Ile Glu Arg Ser Leu  
 100 105 110

Gly Val Gln Arg Val Tyr Thr Leu Gln Asp Leu Leu Tyr Gln Ser Asp  
 115 120 125

Cys Val Ser Leu His Cys Asn Leu Asn Glu His Asn His His Leu Ile  
 130 135 140

Asn Asp Phe Thr Ile Lys Gln Met Arg Gln Gly Ala Phe Leu Val Asn  
 145 150 155 160

Ala Ala Arg Gly Gly Leu Val Asp Glu Lys Ala Leu Ala Gln Ala Leu  
 165 170 175

Lys Glu Gly Arg Ile Arg Gly Ala Ala Leu Asp Val His Glu Ser Glu

180	185	190
Pro Phe Ser Phe Ala Gln Gly	Pro Leu Lys Asp Ala	Pro Asn Leu Ile
195	200	205
Cys Thr Pro His Thr Ala Trp Tyr Ser Glu Gln Ala Ser Leu Glu Met		
210	215	220
Arg Glu Ala Ala Ala Thr Glu Ile Arg Arg Ala Ile Thr Gly Arg Ile		
225	230	235 240
Pro Glu Ser Leu Arg Asn Cys Val Asn Lys Glu Phe Phe Val Thr Ser		
245	250	255
Ala Pro Trp Ser Val Ile Asp Gln Gln Ala Ile His Pro Glu Leu Asn		
260	265	270
Gly Ala Thr Tyr Arg Tyr Pro Pro Gly Ile Val Gly Val Ala Pro Gly		
275	280	285
Gly Leu Pro Ala Ala Met Glu Gly Ile Ile Pro Gly Gly Ile Pro Val		
290	295	300
Thr His Asn Leu Pro Thr Val Ala His Pro Ser Gln Ala Pro Ser Pro		
305	310	315 320
Asn Gln Pro Thr Lys His Gly Asp Asn Arg Glu His Pro Asn Glu Gln		
325	330	335

<210> 1409  
 <211> 76  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (73)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (74)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 1409  
 Glu Ala Glu Glu Asp Thr Ser Glu Arg Ser Glu Glu Lys Arg Ser Val

1 5 10 15  
Asn Cys Trp Asp Leu Gly Asp Gln Val Gln Gly Gly Glu Tyr Lys Leu  
20 25 30  
Ser Leu Phe Gly Phe Ala Ile Leu Gly Leu Thr Lys Pro Cys Ser Ile  
35 40 45  
Ser Ser Ile Leu Gly Asn Asn Leu Leu Arg Trp Ala Phe Ile Phe Cys  
50 55 60  
Phe Pro Glu Leu Glu Ile Ser Ile Xaa Xaa Lys Leu  
65 70 75

<210> 1410

<211> 236

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (157)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (167)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (181)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (183)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1410

His Ala Ala Ser Thr Thr Cys Pro Glu Gln Met Asp Cys Ser Pro Thr  
1 5 10 15  
Asp Ser Ser Ser Ala Ser Pro Gly Ala Ser Thr Thr Ser Thr Pro Gly  
20 25 30  
Ala Ser Pro Ala Pro Arg Ser Arg Lys Pro Gly Ala Val Ile Glu Ser  
35 40 45

35	40	45
Gly Leu Glu Glu Gln Leu Arg Ala Val Arg Met Pro Ser Pro Phe Arg		
50	55	60
Ser Ser Ala Leu Met Gly Met Cys Gly Ser Arg Ser Ala Asp Asn Leu		
65	70	75 80
Ser Cys Pro Ser Pro Leu Asn Val Met Glu Pro Val Thr Glu Leu Met		
85	90	95
Gln Glu Gln Ser Tyr Leu Lys Ser Glu Leu Gly Leu Gly Leu Gly Glu		
100	105	110
Met Gly Phe Glu Ile Pro Pro Gly Glu Ser Ser Glu Ser Val Phe Ser		
115	120	125
Gln Ala Thr Ser Glu Ser Ser Ser Val Cys Ser Gly Pro Ser His Ala		
130	135	140
Asn Arg Arg Thr Gly Val Pro Ser Thr Ala Ser Val Gly Lys Ser Lys		
145	150	155 160
Thr Pro Leu Val Ala Arg Lys Lys Val Phe Arg Ala Ser Val Ala Leu		
165	170	175
Thr Pro Thr Ala Pro Ser Arg Thr Gly Ser Val Gln Thr Pro Pro Asp		
180	185	190
Leu Glu Ser Ser Glu Glu Val Asp Ala Ala Glu Gly Ala Pro Glu Val		
195	200	205
Val Gly Pro Lys Ser Glu Val Glu Glu Gly His Gly Lys Leu Pro Ser		
210	215	220
Met Pro Ala Ala Glu Glu Met His Lys Asn Val Glu Gln Asp Glu Leu		
225	230	235 240
Gln Gln Val Ile Arg Glu Ile Lys Glu Ser Ile Val Gly Glu Ile Arg		
245	250	255
Arg Glu Ile Val Ser Gly Leu Leu Ala Ala Val Ser Ser Ser Lys Ala		
260	265	270
Ser Asn Ser Lys Gln Asp Tyr His		
275	280	

&lt;210&gt; 1412

&lt;211&gt; 96

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (31)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (93)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (96)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1412

Pro Gln His Thr Thr Pro Pro Pro Thr Glu Thr Gly Thr Ser Gly Leu  
1 5 10 15

Ser Ser Gly Val Ser Gly Ser Thr Thr Ala Ala Ser Ser Pro Xaa Gly  
20 25 30

Leu Val Glu Arg Glu Gly Val Val Leu Val Phe Gly Pro Leu Thr Ala  
35 40 45

Asp Ser Gln Glu Val Leu Arg Arg Ala Trp His Trp Ala Gln Arg Leu  
50 55 60

Gln Asp Tyr Cys Ala Thr Gln Pro Ala Leu Phe His Val Gly Phe Pro  
65 70 75 80

Val Ser Leu Ile Asp His Glu Gly Phe Gln Val Cys Xaa Asp Ser Xaa  
85 90 95

<210> 1413

<211> 172

<212> PRT

<213> Homo sapiens

<400> 1413

Phe Ser Val Phe Val Leu Tyr Ser Leu Arg Asn Ala Ser Gly Leu Thr  
1 5 10 15



Ala Ala Asp Ile Ala Gln Thr Gln Gly Phe Gln Glu Cys Ala Gln Phe  
20 25 30  
Leu Leu Asn Leu Gln Asn Cys His Leu Asn His Phe Tyr Asn Asn Gly  
35 40 45  
Ile Leu Asn Gly Gly His Gln Asn Val Phe Pro Asn His Ile Ser Val  
50 55 60  
Gly Thr Asn Arg Lys Arg Cys Leu Glu Asp Ser Glu Asp Phe Gly Val  
65 70 75 80  
Lys Lys Ala Arg Thr Glu Ala Gln Ser Leu Asp Ser Ala Val Pro Leu  
85 90 95  
Thr Asn Gly Asp Thr Glu Asp Asp Ala Asp Lys Met His Val Asp Arg  
100 105 110  
Glu Phe Ala Val Val Thr Gly Gly Ser Gly Gln Phe Pro Val Ser Cys  
115 120 125  
Asn Asn Asn Pro Met Val Glu Asp Thr Lys Gln Gln Glu Ser Gly Ser  
130 135 140  
Val Gly Pro Lys Glu Ile Glu Ile Tyr Thr Val Ser Ala Met Gln Thr  
145 150 155 160  
Pro Cys Arg Cys Arg Asn Gln Tyr Ala Tyr Tyr Phe  
165 170

<210> 1414

<211> 264

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (21)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (46)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (85)

<223> Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (107)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (173)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1414

Leu Cys Ala Pro Arg Ser Pro Arg Pro Gly Thr Gly Asp Ala Ala Pro  
1 5 10 15

Pro Ser Glu Pro Xaa Ala Ser Ala Ser Gly Thr Asp Leu Leu Gly Trp  
20 25 30

Leu Ile Lys Glu Glu Ala Ala Ala Met Ser Ala Val Gly Xaa Ala Thr  
35 40 45

Pro Tyr Leu His His Pro Gly Asp Ser His Ser Gly Arg Val Ser Phe  
50 55 60

Leu Gly Ala Gln Leu Pro Pro Glu Val Ala Ala Met Ala Arg Leu Leu  
65 70 75 80

Gly Asp Leu Asp Xaa Ser Thr Phe Arg Lys Leu Leu Lys Phe Val Val  
85 90 95

Ser Ser Leu Gln Gly Glu Asp Cys Arg Glu Xaa Leu Gln Arg Leu Gly  
100 105 110

Val Ser Ala Asn Leu Pro Glu Glu Gln Leu Gly Ala Leu Leu Ala Gly  
115 120 125

Met His Thr Leu Leu Gln Gln Ala Leu Arg Leu Pro Pro Thr Ser Leu  
130 135 140

Lys Pro Asp Thr Phe Arg Asp Gln Leu Gln Glu Leu Cys Ile Pro Gln  
145 150 155 160

Asp Leu Val Gly Asp Leu Ala Ser Val Val Phe Gly Xaa Pro Ala Ala  
165 170 175

Leu Leu Asp Ser Val Ala Gln Gln Gln Gly Ala Trp Leu Pro His Val  
180 185 190

Ala Asp Phe Arg Trp Arg Val Asp Val Ala Ile Ser Thr Ser Ala Leu  
195 200 205

Ala Arg Ser Leu Gln Pro Ser Val Leu Met Gln Leu Lys Leu Ser Asp  
 210 215 220

Gly Ser Ala Tyr Arg Phe Glu Val Pro Thr Ala Lys Phe Gln Glu Leu  
 225 230 235 240

Arg Tyr Ser Val Ala Leu Val Leu Lys Glu Met Ala Asp Leu Glu Lys  
 245 250 255

Arg Cys Glu Arg Arg Leu Gln Asp  
 260

<210> 1415

<211> 579

<212> PRT

<213> Homo sapiens

<400> 1415

Ala Ala Asp Arg Gly Arg Gly Pro Gly Ala His Arg Pro Ile Ser Gly  
 1 5 10 15

Asn Met Ala Thr Glu His Val Asn Gly Asn Gly Thr Glu Glu Pro Met  
 20 25 30

Asp Thr Thr Ser Ala Val Ile His Ser Glu Asn Phe Gln Thr Leu Leu  
 35 40 45

Asp Ala Gly Leu Pro Gln Lys Val Ala Glu Lys Leu Asp Glu Ile Tyr  
 50 55 60

Val Ala Gly Leu Val Ala His Ser Asp Leu Asp Glu Arg Ala Ile Glu  
 65 70 75 80

Ala Leu Lys Glu Phe Asn Glu Asp Gly Ala Leu Ala Val Leu Gln Gln  
 85 90 95

Phe Lys Asp Ser Asp Leu Ser His Val Gln Asn Lys Ser Ala Phe Leu  
 100 105 110

Cys Gly Val Met Lys Thr Tyr Arg Gln Arg Glu Lys Gln Gly Thr Lys  
 115 120 125

Val Ala Asp Ser Ser Lys Gly Pro Asp Glu Ala Lys Ile Lys Ala Leu  
 130 135 140

Leu Glu Arg Thr Gly Tyr Thr Leu Asp Val Thr Thr Gly Gln Arg Lys  
 145 150 155 160

Tyr Gly Gly Pro Pro Pro Asp Ser Val Tyr Ser Gly Gln Gln Pro Ser

165	170	175
Val Gly Thr Glu Ile Phe Val Gly Lys Ile Pro Arg Asp Leu Phe Glu		
180	185	190
Asp Glu Leu Val Pro Leu Phe Glu Lys Ala Gly Pro Ile Trp Asp Leu		
195	200	205
Arg Leu Met Met Asp Pro Leu Thr Gly Leu Asn Arg Gly Tyr Ala Phe		
210	215	220
Val Thr Phe Cys Thr Lys Glu Ala Ala Gln Glu Ala Val Lys Leu Tyr		
225	230	235
Asn Asn His Glu Ile Arg Ser Gly Lys His Ile Gly Val Cys Ile Ser		
245	250	255
Val Ala Asn Asn Arg Leu Phe Val Gly Ser Ile Pro Lys Ser Lys Thr		
260	265	270
Lys Glu Gln Ile Leu Glu Glu Phe Ser Lys Val Thr Glu Gly Leu Thr		
275	280	285
Asp Val Ile Leu Tyr His Gln Pro Asp Asp Lys Lys Lys Asn Arg Gly		
290	295	300
Phe Cys Phe Leu Glu Tyr Glu Asp His Lys Thr Ala Ala Gln Ala Arg		
305	310	315
Arg Arg Leu Met Ser Gly Lys Val Lys Val Trp Gly Asn Val Gly Thr		
325	330	335
Val Glu Trp Ala Asp Pro Ile Glu Asp Pro Asp Pro Glu Val Met Ala		
340	345	350
Lys Val Lys Val Leu Phe Val Arg Asn Leu Ala Asn Thr Val Thr Glu		
355	360	365
Glu Ile Leu Glu Lys Ala Phe Ser Gln Phe Gly Lys Leu Glu Arg Val		
370	375	380
Lys Lys Leu Lys Asp Tyr Ala Phe Ile His Phe Asp Glu Arg Asp Gly		
385	390	395
Ala Val Lys Ala Met Glu Glu Met Asn Gly Lys Asp Leu Glu Gly Glu		
405	410	415
Asn Ile Glu Ile Val Phe Ala Lys Pro Pro Asp Gln Lys Arg Lys Glu		
420	425	430
Arg Lys Ala Gln Arg Gln Ala Ala Lys Asn Gln Met Tyr Asp Asp Tyr		

435	440	445
Tyr Tyr Tyr Gly Pro Pro His Met Pro Pro Pro Thr Arg Gly Arg Gly		
450	455	460
Arg Gly Gly Arg Gly Gly Tyr Gly Tyr Pro Pro Asp Tyr Tyr Gly Tyr		
465	470	475
Glu Asp Tyr Tyr Asp Tyr Tyr Gly Tyr Asp Tyr His Asn Tyr Arg Gly		
485	490	495
Gly Tyr Glu Asp Pro Tyr Tyr Gly Tyr Glu Asp Phe Gln Val Gly Ala		
500	505	510
Arg Gly Arg Gly Gly Arg Gly Ala Arg Gly Ala Ala Pro Ser Arg Gly		
515	520	525
Arg Gly Ala Ala Pro Pro Arg Gly Arg Ala Gly Tyr Ser Gln Arg Gly		
530	535	540
Gly Pro Gly Ser Ala Arg Gly Val Arg Gly Ala Arg Gly Gly Ala Gln		
545	550	555
Gln Gln Arg Gly Arg Gly Gln Gly Lys Gly Val Glu Ala Gly Pro Asp		
565	570	575
Leu Leu Gln		

&lt;210&gt; 1416

&lt;211&gt; 230

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (196)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (204)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (230)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1416

Ser Thr His Ala Ser Ala His Ala Ser Glu Pro Gly Gln Gly Gly Trp  
1 5 10 15

Pro Glu Val Pro Ala Glu Gly Ala Ser Arg Pro Cys Ala Ala Val Pro  
20 25 30

Gly Gly Gln Arg Gly Cys Pro Ala Cys Pro Leu Ala Gly Glu Arg Glu  
35 40 45

Leu Thr His Leu Leu Leu Pro Ala Ser Glu Gly Asp Thr Glu Pro Gln  
50 55 60

Val Thr Pro His His Gln Arg Arg Cys Leu Cys Leu Ser Asp Lys Tyr  
65 70 75 80

Ser Gln Ala Cys His Pro Leu Gly Ser Lys Val Arg Arg Cys Arg Lys  
85 90 95

Pro Gly Pro Arg Asp Arg Gln Leu Thr Arg Val Asp Lys Ser Pro Glu  
100 105 110

Met Trp Cys Ile Val Leu Phe Ser Leu Leu Ala Trp Val Tyr Ala Glu  
115 120 125

Pro Thr Met Tyr Gly Glu Ile Leu Ser Pro Asn Tyr Pro Gln Ala Tyr  
130 135 140

Pro Ser Glu Val Glu Lys Ser Trp Asp Ile Glu Val Pro Glu Gly Tyr  
145 150 155 160

Gly Ile His Leu Tyr Phe Thr His Leu Asp Ile Glu Leu Ser Glu Asn  
165 170 175

Cys Ala Tyr Asp Ser Val Gln Ile Ile Ser Gly Asp Thr Glu Glu Gly  
180 185 190

Arg Leu Cys Xaa Gln Arg Ser Ser Asn Asn Pro Xaa Leu Gln Leu Trp  
195 200 205

Lys Ser Ser Lys Ser His Thr Thr Asn Ser Lys Gly Gly Asn Pro Leu  
210 215 220

Phe Phe Leu Lys Lys Xaa  
225 230

&lt;210&gt; 1417

&lt;211&gt; 106

&lt;212&gt; PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (17)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (75)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1417

Ala Leu Pro Val Met Thr Ala Ala Gly Thr Gly Trp Pro Glu Ala Gly  
1 5 10 15

Xaa Leu Pro Glu Val Met Gly Asp Gly Leu Ala Asn Gln Ile Asn Asn  
20 25 30

Pro Glu Val Glu Val Asp Ile Thr Lys Pro Asp Met Thr Ile Arg Gln  
35 40 45

Gln Ile Met Gln Leu Lys Ile Met Thr Asn Arg Leu Arg Ser Leu Thr  
50 55 60

Thr Ala Thr Thr Trp Thr Ser Arg Thr Pro Xaa Thr Thr Ala Ala Ala  
65 70 75 80

Arg Ala Ala Val Met Ala Val Trp Met Thr Ser Ala Ala Gly Arg Ser  
85 90 95

Ala Gly Arg Ala Pro Ala Pro Gly Arg Pro  
100 105

<210> 1418

<211> 258

<212> PRT

<213> Homo sapiens

<400> 1418

Gly His Leu Leu Leu Cys Ala Trp Gly Pro Gly Gly Pro Gly Pro Leu  
1 5 10 15

Gly Pro Ser Glu Glu Asn Phe Asp Met Glu Ala Phe Thr Glu Met Met  
20 25 30

Glu Ala Tyr Val Pro Gly Phe Ala His Ile Pro Arg Gly Thr Ile Gly  
35 40 45

Asp Met Met Gln Lys Leu Ser Gly Gln Leu Ser Asp Ala Arg Asn Lys  
 50 55 60  
 Glu Asn Leu Gln Pro Gln Ser Ser Gly Val Gln Gly Gln Val Pro Ile  
 65 70 75 80  
 Ser Pro Glu Pro Leu Gln Arg Pro Glu Met Leu Lys Glu Glu Thr Arg  
 85 90 95  
 Ser Ser Ala Ala Ala Ala Ala Asp Thr Gln Asp Glu Ala Thr Gly Ala  
 100 105 110  
 Glu Glu Glu Leu Leu Pro Gly Val Asp Val Leu Leu Glu Val Phe Pro  
 115 120 125  
 Thr Cys Ser Val Glu Gln Ala Gln Trp Val Leu Ala Lys Ala Arg Gly  
 130 135 140  
 Asp Leu Glu Glu Ala Val Gln Met Leu Val Glu Gly Lys Glu Glu Gly  
 145 150 155 160  
 Pro Ala Ala Trp Glu Gly Pro Asn Gln Asp Leu Pro Arg Arg Leu Arg  
 165 170 175  
 Gly Pro Gln Lys Asp Glu Leu Lys Ser Phe Ile Leu Gln Lys Tyr Met  
 180 185 190  
 Met Val Asp Ser Ala Glu Asp Gln Lys Ile His Arg Pro Met Ala Pro  
 195 200 205  
 Lys Glu Ala Pro Lys Lys Leu Ile Arg Tyr Ile Asp Asn Gln Val Val  
 210 215 220  
 Ser Thr Lys Gly Glu Arg Phe Lys Asp Val Arg Asn Pro Glu Ala Glu  
 225 230 235 240  
 Glu Met Lys Ala Thr Tyr Ile Asn Leu Lys Pro Ala Arg Lys Tyr Arg  
 245 250 255  
 Phe His

&lt;210&gt; 1419

&lt;211&gt; 280

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1419

Leu Val Glu Pro Ala Met Ala Glu Pro Ala Ser Val Ala Ala Glu Ser



1	5	10	15
Leu Ala Gly Ser Arg Ala Arg Ala Ala Arg Thr Val Leu Gly Gln Val	20	25	30
Val Leu Pro Gly Glu Glu Leu Leu Leu Pro Glu Gln Glu Asp Ala Glu	35	40	45
Gly Pro Gly Gly Ala Val Glu Arg Pro Leu Ser Leu Asn Ala Arg Ala	50	55	60
Cys Ser Arg Val Arg Val Val Cys Gly Pro Gly Leu Arg Arg Cys Gly	65	70	75
Asp Arg Leu Leu Val Thr Lys Cys Gly Arg Leu Arg His Lys Glu Pro	85	90	95
Gly Ser Gly Ser Gly Gly Gly Val Tyr Trp Val Asp Ser Gln Gln Lys	100	105	110
Arg Tyr Val Pro Val Lys Gly Asp His Val Ile Gly Ile Val Thr Ala	115	120	125
Lys Ser Gly Asp Ile Phe Lys Val Asp Val Gly Gly Ser Glu Pro Ala	130	135	140
Ser Leu Ser Tyr Leu Ser Phe Glu Gly Ala Thr Lys Arg Asn Arg Pro	145	150	155
Asn Val Gln Val Gly Asp Leu Ile Tyr Gly Gln Phe Val Val Ala Asn	165	170	175
Lys Asp Met Glu Pro Glu Met Val Cys Ile Asp Ser Cys Gly Arg Ala	180	185	190
Asn Gly Met Gly Val Ile Gly Gln Asp Gly Leu Leu Phe Lys Val Thr	195	200	205
Leu Gly Leu Ile Arg Lys Leu Leu Ala Pro Asp Cys Glu Ile Ile Gln	210	215	220
Glu Val Gly Lys Leu Tyr Pro Leu Glu Ile Val Phe Gly Met Asn Gly	225	230	235
Arg Ile Trp Val Lys Ala Lys Thr Ile Gln Gln Thr Leu Ile Leu Ala	245	250	255
Asn Ile Leu Glu Ala Cys Glu His Met Thr Ser Asp Gln Arg Lys Gln	260	265	270
Ile Phe Ser Arg Leu Ala Glu Ser			

275

280

<210> 1420  
<211> 147  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (10)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (104)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (105)  
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1420  
Phe Pro Gly Thr Gly Ser Asp Gly Gly Xaa Pro Glu Thr Val Asp Ser  
1 5 10 15

Gly Arg Ser Glu Pro Pro Gly Ala Val Val Leu Pro Arg Leu Arg Glu  
20 25 30

Val Gly Arg Glu Arg Thr Trp Arg Pro Gly Ser Met Ala Gly Leu Glu  
35 40 45

Leu Leu Ser Asp Gln Gly Tyr Arg Val Asp Gly Arg Arg Ala Gly Glu  
50 55 60

Leu Arg Lys Ile Gln Ala Arg Met Gly Val Phe Ala Gln Ala Asp Gly  
65 70 75 80

Ser Ala Tyr Ile Glu Gln Gly Asn Thr Lys Ala Leu Ala Val Val Tyr  
85 90 95

Gly Pro His Glu Ala Ser Gly Xaa Xaa Gly Trp Gly Ile Val Trp Pro  
100 105 110

Trp Glu Leu Arg Gly Ser Arg Ala Glu Arg Trp Leu Gly Asp Leu Arg  
115 120 125

Gly Lys Ala Ala Arg Leu Ile Tyr Thr Ala Met Leu Ser Thr Ala Ser  
130 135 140

His Ser Glu  
145

<210> 1421  
<211> 300  
<212> PRT  
<213> Homo sapiens

<400> 1421

Gly Leu Pro Ile Asn Cys Ile Cys Glu Arg Leu Asn Ile Ile Gly Glu  
1 5 10 15

Ile Asn Thr Asp Thr Val Tyr Arg Gln Ala Ile Asn Ser Lys Met Phe  
20 25 30

Glu Val Asp Met Lys Ile Ala Ala Met His Val Lys Arg Lys Gln Leu  
35 40 45

His Gln Leu Leu Pro Asn His Val Leu Gln Lys Lys Lys Lys His Ser  
50 55 60

Thr Glu Gly Val Lys Leu Thr Ala Leu Asn Asp Ser Ser Leu Asp Leu  
65 70 75 80

Ser Met Asp Ser Asp Asn Ser Met Ser Val Pro Ser Pro Thr Ser Ala  
85 90 95

Thr Lys Thr Ser Pro Leu Asn Ser Ser Gly Ser Ser Gln Gly Arg Asn  
100 105 110

Ser Pro Ala Pro Ala Val Thr Ala Ala Ser Val Thr Asn Ile Gln Ala  
115 120 125

Thr Glu Val Ser Val Pro Gln Val Asn Ser Ser Glu Ser Ser Gly Gly  
130 135 140

Thr Ser Ser Glu Ser Ile Pro Gln Thr Ala Thr Gln Pro Ala Ile Ser  
145 150 155 160

Pro Pro Pro Lys Pro Thr Val Ser Arg Val Val Ser Ser Thr Arg Leu  
165 170 175

Val Asn Pro Pro Pro Arg Ser Ser Gly Asn Ala Ala Thr Ser Gly Asn  
180 185 190

Ala Ala Thr Lys Ile Pro Thr Pro Ile Val Gly Val Lys Arg Thr Ser  
195 200 205

Ser Pro His Lys Glu Glu Ser Pro Lys Lys Thr Lys Thr Glu Glu Asp  
210 215 220

Glu Thr Ser Glu Asp Ala Asn Cys Leu Ala Leu Ser Gly His Asp Lys  
225 230 235 240

Thr Glu Ala Lys Glu Gln Leu Asp Thr Glu Thr Ser Thr Thr Gln Ser  
245 250 255

Glu Thr Ile Gln Thr Ala Ala Ser Leu Leu Ala Ser Gln Lys Thr Ser  
260 265 270

Ser Thr Asp Leu Ser Asp Ile Pro Ala Leu Pro Ala Asn Pro Ile Pro  
275 280 285

Val Ile Lys Asn Ser Ile Lys Leu Arg Leu Asn Arg  
290 295 300

<210> 1422

<211> 315

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (125)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (177)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1422

Asp Ser Pro Leu His Leu Tyr Gln Lys Asn Ala Arg Leu Lys Asn Val  
1 5 10 15

Glu Phe Leu Leu Val Asn Arg Ile His Cys Gly Thr Arg His Gln Cys  
20 25 30

Leu Gly Tyr Ile Lys Arg Arg Leu Ala Met Cys Ala Arg Arg Leu Gly  
35 40 45

Arg Thr Arg Glu Ala Val Lys Met Met Arg Asp Leu Met Lys Glu Phe  
50 55 60

Pro Leu Leu Ser Met Phe Asn Ile His Glu Asn Leu Leu Glu Ala Leu  
65 70 75 80

Leu Glu Leu Gln Ala Tyr Ala Asp Val Gln Ala Val Leu Ala Lys Tyr  
                             85                            90                            95  
 Asp Asp Ile Ser Leu Pro Lys Ser Ala Thr Ile Cys Tyr Thr Ala Ala  
                             100                            105                            110  
 Leu Leu Lys Ala Arg Ala Val Ser Asp Lys Phe Ser Xaa Glu Ala Ala  
                             115                            120                            125  
 Ser Arg Arg Gly Leu Ser Thr Ala Glu Met Asn Ala Val Glu Ala Ile  
                             130                            135                            140  
 His Arg Ala Val Glu Phe Asn Pro His Val Pro Lys Tyr Leu Leu Glu  
                             145                            150                            155                            160  
 Met Lys Ser Leu Ile Leu Pro Pro Glu His Ile Leu Lys Arg Gly Asp  
                             165                            170                            175  
 Xaa Glu Ala Ile Ala Tyr Ala Phe Phe His Leu Ala His Trp Lys Arg  
                             180                            185                            190  
 Val Glu Gly Ala Leu Asn Leu Leu His Cys Thr Trp Glu Gly Thr Phe  
                             195                            200                            205  
 Arg Met Ile Pro Tyr Pro Leu Glu Lys Gly His Leu Phe Tyr Pro Tyr  
                             210                            215                            220  
 Pro Ile Cys Thr Glu Thr Ala Asp Arg Glu Leu Leu Pro Ser Phe His  
                             225                            230                            235                            240  
 Glu Val Ser Val Tyr Pro Lys Lys Glu Leu Pro Phe Phe Ile Leu Phe  
                             245                            250                            255  
 Thr Ala Gly Leu Cys Ser Phe Thr Ala Met Leu Ala Leu Leu Thr His  
                             260                            265                            270  
 Gln Phe Pro Glu Leu Met Gly Val Phe Ala Lys Ala Phe Leu Ser Thr  
                             275                            280                            285  
 Leu Phe Ala Pro Leu Asn Phe Val Met Glu Lys Val Glu Ser Ile Leu  
                             290                            295                            300  
 Pro Ser Ser Leu Trp His Gln Leu Thr Arg Ile  
                             305                            310                            315

&lt;210&gt; 1423

&lt;211&gt; 164

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1423

Ser Phe Pro Tyr Leu Phe Leu Gln Ser Lys Asn Arg Trp Cys Phe Ala  
 1 5 10 15

Arg Glu Leu Val Lys Arg Tyr Gln Glu Lys Trp Asp Lys Leu Leu Leu  
 20 25 30

Thr Ser Thr Glu Lys Ser His Val Asp Leu Phe Pro Lys Asp Ser Ile  
 35 40 45

Ile Tyr Leu Thr Ala Asp Ser Pro Asn Val Met Thr Thr Phe Arg His  
 50 55 60

Asp Lys Val Tyr Val Ile Gly Ser Phe Val Asp Lys Ser Met Gln Pro  
 65 70 75 80

Gly Thr Ser Leu Ala Lys Ala Lys Arg Leu Asn Leu Ala Thr Glu Cys  
 85 90 95

Leu Pro Leu Asp Lys Tyr Leu Gln Trp Glu Ile Gly Asn Lys Asn Leu  
 100 105 110

Thr Leu Asp Gln Met Ile Arg Ile Leu Leu Cys Leu Lys Asn Asn Gly  
 115 120 125

Asn Trp Gln Glu Ala Leu Gln Phe Val Pro Lys Arg Lys His Thr Gly  
 130 135 140

Phe Leu Glu Ile Ser Gln His Ser Gln Glu Phe Ile Asn Arg Leu Lys  
 145 150 155 160

Lys Ala Lys Thr

&lt;210&gt; 1424

&lt;211&gt; 81

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1424

Glu Val Trp Leu Phe Met His Pro Ser Ser Arg Ala Leu Lys Leu His  
 1 5 10 15

Gly Leu Ile Lys Val Asp Ala Lys Gln Glu Arg Asn Lys Gln Lys Lys  
 20 25 30

Lys Thr Ser Lys Met Phe Thr Lys Lys Leu Lys Gln Met Ser Ser Ala  
 35 40 45

Cys Ser Ile Ser Gln Ser Leu Leu Ser Ser Val Val Asn Met Phe Gln  
 50 55 60

Met Thr Phe Ser Trp Lys Lys Asn Leu Tyr Asn Ile Val Glu Cys Glu  
 65 70 75 80

Gly

<210> 1425

<211> 172

<212> PRT

<213> Homo sapiens

<400> 1425

Met Gly Gly Asp Ala Gly Asp Arg Glu Pro Gly Pro Ala Ala Arg Ser  
 1 5 10 15

Leu Gly Glu Gly Gln Ala Gly Phe Ala Thr Ala Asp His Ser Gly Gln  
 20 25 30

Glu Arg Glu Thr Glu Lys Ala Met Asp Arg Leu Ala Arg Gly Thr Gln  
 35 40 45

Ser Ile Pro Asn Asp Ser Pro Ala Arg Gly Glu Gly Thr His Ser Glu  
 50 55 60

Glu Glu Gly Phe Ala Met Asp Glu Glu Asp Ser Asp Gly Glu Leu Asn  
 65 70 75 80

Thr Trp Glu Leu Ser Glu Gly Thr Asn Cys Pro Pro Lys Glu Gln Pro  
 85 90 95

Gly Asp Leu Phe Asn Glu Asp Trp Asp Ser Glu Leu Lys Ala Asp Gln  
 100 105 110

Gly Asn Pro Tyr Asp Ala Asp Asp Ile Gln Glu Ser Ile Ser Gln Glu  
 115 120 125

Leu Lys Pro Trp Val Cys Cys Ala Pro Gln Gly Asp Met Ile Tyr Asp  
 130 135 140

Pro Ser Trp His His Pro Pro Pro Leu Ile Pro Tyr Tyr Ser Lys Met  
 145 150 155 160

Val Phe Glu Thr Gly Gln Phe Asp Asp Ala Glu Asp  
 165 170

<210> 1426  
 <211> 276  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (43)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (273)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (275)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 1426  
 Cys Lys Lys Gln Arg Leu Gln Gln Gln Gln Gln Gln Arg Arg Trp Gln  
   1                  5                  10                  15  
 Gln Gln Gln Gln Arg Arg Gln Gln Gln Gln Gln Arg Arg His Arg Trp  
                   20                  25                  30  
 Gln Gln Gln His His Gln Gln Gln Gln Gln Xaa Lys Ile Leu Ile Lys  
           35                  40                  45  
 Ser Ser Pro Lys Leu Ser Val Tyr Pro Asp Pro His Leu His Ser Ser  
   50                  55                  60  
 Gln Glu Arg Glu Arg Gly Lys Gly Gly Arg Lys Lys Lys Lys Pro Asn  
   65                  70                  75                  80  
 Asn Leu Ala Glu Thr Ser Gln Arg Met Leu Gln Asn Ser Ala Val Leu  
                   85                  90                  95  
 Leu Val Leu Val Ile Ser Ala Ser Ala Thr His Glu Ala Glu Gln Asn  
   100                  105                  110  
 Asp Ser Val Ser Pro Arg Lys Ser Arg Val Ala Ala Gln Asn Ser Ala  
   115                  120                  125  
 Glu Val Val Arg Cys Leu Asn Ser Ala Leu Gln Val Gly Cys Gly Ala  
   130                  135                  140  
 Phe Ala Cys Leu Glu Asn Ser Thr Cys Asp Thr Asp Gly Met Tyr Asp



145	150	155	160
Ile Cys Lys Ser Phe Leu Tyr Ser Ala Ala Lys Phe Asp Thr Gln Gly	165	170	175
Lys Ala Phe Val Lys Glu Ser Leu Lys Cys Ile Ala Asn Gly Val Thr	180	185	190
Ser Lys Val Phe Leu Ala Ile Arg Arg Cys Ser Thr Phe Gln Arg Met	195	200	205
Ile Ala Glu Val Gln Glu Glu Cys Tyr Ser Lys Leu Asn Val Cys Ser	210	215	220
Ile Ala Lys Arg Asn Pro Glu Ala Ile Thr Glu Val Val Gln Leu Pro	225	230	235
Asn His Phe Ser Asn Arg Tyr Tyr Asn Arg Leu Val Arg Ser Leu Leu	245	250	255
Glu Cys Asp Glu Asp Thr Val Ser Thr Ile Arg Asp Ser Leu Met Glu	260	265	270
Xaa Ile Xaa Ala	275		

&lt;210&gt; 1427

&lt;211&gt; 166

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (36)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (54)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1427

Cys	Asn	Ser	Arg	Ser	Gln	Gly	Leu	Ala	Leu	Thr	Gln	Val	Ala	Ser	Arg
1				5					10					15	

Ile	Pro	Val	Gly	Lys	Arg	Pro	Ala	Thr	Ser	Gly	Leu	Glu	Leu	Ala	Cys
		20					25						30		

Val	Pro	Pro	Xaa	Pro	Ala	Pro	Pro	Thr	Ser	Arg	Val	Gln	Cys	Trp	Ala
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

35	40	45
Arg Ala Ala Gln Glu Xaa Arg Thr Arg Arg Leu Ala Arg His Gln Thr		
50	55	60
His Pro Thr Gln Arg Arg Gly Pro Gln Ala Arg Pro Val Val Pro Ser		
65	70	75 80
Arg Trp His Cys Ser Ser Pro Leu Leu Gln Val Gln Arg Pro His Arg		
	85	90 95
Asn Thr Arg Ala Cys Ala Pro Glu Pro Ser Phe Arg Pro Phe Leu His		
	100	105 110
Val Pro Thr Trp Asp Ala Glu Cys Ser Gly Ala Arg Thr Pro Ser Thr		
	115	120 125
Ala Trp Thr Ser Ala Ala Val Lys Leu Arg Glu Ala Cys Leu Ser Gly		
	130	135 140
Pro Gly Ser Gly Ser His Gln Leu Leu Leu Leu Thr Pro Arg Ser Lys		
145	150	155 160
Arg Arg Thr Gly Gly Gly		
	165	

&lt;210&gt; 1428

&lt;211&gt; 112

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (20)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (57)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1428

Gln Arg Gly Ser Thr Ser Glu Thr Pro Arg Arg Arg Ser Ser Val Trp
1 5 10 15

Pro Ala Cys Xaa Gln Glu Gly Val Lys Ser Gly Met Tyr Val Val Ile
20 25 30

Glu Val Lys Val Ala Thr Gln Glu Gly Lys Glu Ile Thr Cys Arg Ser

35                                      40                                      45  
 Tyr Leu Met Thr Asn Tyr Glu Ser Xaa Pro Pro Ser Pro Gln Tyr Lys  
     50                                      55                                      60  
 Lys Ile Ile Cys Met Gly Ala Lys Glu Asn Gly Leu Pro Leu Glu Tyr  
     65                                      70                                      75                                      80  
 Gln Glu Lys Leu Lys Ala Ile Glu Pro Asn Asp Tyr Thr Gly Lys Val  
                                     85                                      90                                      95  
 Ser Glu Glu Ile Glu Asp Ile Ile Lys Lys Gly Glu Thr Gln Thr Leu  
                                     100                                      105                                      110

<210> 1429

<211> 94

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (7)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (80)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1429

Pro Gly Thr His Val Ser Xaa Pro His Phe Leu Trp Gly Cys Ala Ser  
     1                                      5                                      10                                      15  
 Leu Arg Val Ala Asn Arg Met Ser Ser Val Gln Trp Trp Ser Gln Asp  
                                     20                                      25                                      30  
 Ser Val Cys Arg Ala Asp Phe Leu Ser Leu Leu Lys Thr Leu Asn Thr  
                                     35                                      40                                      45  
 Ala Val Phe Ser Ser Gln Gln Arg Asn Lys Ile Ser Leu Ser Asp Asn  
     50                                      55                                      60  
 Asp Asn Asn Lys Gln Ser Ile Ala Ser Thr Ala Phe Thr Ala Tyr Xaa  
     65                                      70                                      75                                      80  
 Lys Thr Tyr Tyr Val Pro Gly Thr Ser Thr Asp Phe Asn Leu

85

90

&lt;210&gt; 1430

&lt;211&gt; 95

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1430

Leu Ser Lys Gln Arg Pro Ala Val Gly Val His His Ala Phe His Leu  
1 5 10 15

Pro His Cys Phe Phe Ala Ser Leu Leu Glu Ser Pro Val Ser Pro Arg  
20 25 30

Leu Ala Met Asp Pro Asn Cys Ser Cys Ala Ala Gly Val Ser Cys Thr  
35 40 45

Cys Ala Gly Ser Cys Lys Cys Lys Glu Cys Lys Cys Thr Ser Cys Lys  
50 55 60

Lys Ser Cys Cys Ser Cys Cys Pro Val Gly Cys Ser Lys Cys Ala Gln  
65 70 75 80

Gly Cys Val Cys Lys Gly Ala Ser Glu Lys Cys Ser Cys Cys Asp  
85 90 95

&lt;210&gt; 1431

&lt;211&gt; 81

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (37)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (38)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1431

Pro Arg His Leu Ile Thr Ile Ser Tyr Val Val Ala Val Arg Asn Ala  
1 5 10 15

Phe Gln Val Gly Thr Trp Asp Pro Glu Ser Thr Phe Ala Pro Cys Gly  
20 25 30



Arg Asn Leu Leu Glu Glu Arg Lys Ser Asp Gln Leu Gly Leu Pro Gln  
                     85                    90                    95

Thr Leu Gln Gln Glu Phe Ser Leu Ile Asn Val Gln Ile Arg Asn Val  
                     100                    105                    110

Asn Xaa Glu Met Asp Ala Ala Asp Arg Ser Cys Thr Val Ser Val His  
                     115                    120                    125

Cys Ser Asn His Arg Val Lys Met Leu Val Lys Phe Pro Ala Gln Tyr  
                     130                    135                    140

Pro Asn Asn Ala Ala Pro Ser Phe Gln Phe Ile Asn Pro Thr Thr Ile  
                     145                    150                    155                    160

Thr Ser Thr Met Lys Ala Lys Leu Leu Lys Ile Leu Lys Asp Thr Ala  
                     165                    170                    175

Leu Gln Lys Val Lys Arg Gly Gln Ser Cys Leu Glu Pro Cys Leu Arg  
                     180                    185                    190

Xaa Ser Ser Pro Ala Leu Ser Pro Xaa  
                     195                    200

<210> 1433

<211> 150

<212> PRT

<213> Homo sapiens

<400> 1433

Thr Val Val Ala Trp Glu Gly Gly Tyr His Thr Phe Ser Thr Cys Leu  
                     1                    5                    10                    15

Thr Val Ser Trp Leu Gln Glu Asp Gln Tyr Asp His Leu Asp Ala Ala  
                     20                    25                    30

Asp Met Thr Lys Val Glu Lys Ser Thr Asn Glu Ala Met Glu Trp Met  
                     35                    40                    45

Asn Asn Lys Leu Asn Leu Gln Asn Lys Gln Ser Leu Thr Met Asp Pro  
                     50                    55                    60

Val Val Lys Ser Lys Glu Ile Glu Ala Lys Ile Lys Glu Leu Thr Ser  
                     65                    70                    75                    80

Thr Cys Ser Pro Ile Ile Ser Lys Pro Lys Pro Lys Val Glu Pro Pro  
                     85                    90                    95

Lys Glu Glu Gln Lys Asn Ala Glu Gln Asn Gly Pro Val Asp Gly Gln

100 105 110  
 Gly Asp Asn Pro Gly Pro Gln Ala Ala Glu Gln Gly Thr Asp Thr Ala  
 115 120 125  
 Val Leu Arg Ile Gln Thr Arg Ser Phe Leu Lys Trp Thr Leu Ile Asp  
 130 135 140  
 Ser Asn Thr Cys Phe Tyr  
 145 150  
  
 <210> 1434  
 <211> 145  
 <212> PRT  
 <213> Homo sapiens  
  
 <400> 1434  
 His Glu Val Val Glu His Asn Pro Ile Ser Val Leu Asp Ser Pro Ser  
 1 5 10 15  
 Ser Asp Cys Phe Ala Glu Trp Pro Gly Glu Leu Gly Arg Gly Trp Met  
 20 25 30  
 Asp Arg Asn Lys His Thr Glu Ser Glu Val Gln Gly Arg Trp Ser Ser  
 35 40 45  
 Phe Ser Leu Cys Arg Val Arg Met Lys Leu Cys Ser Gly Pro Trp Lys  
 50 55 60  
 Cys Pro Trp Gln Lys Pro Asn Pro Arg Phe Gln Gly Thr Leu Pro Ser  
 65 70 75 80  
 Cys Glu Arg Glu Arg Asn Cys Gly Gln Gly Leu Gly Leu Glu Ala Gly  
 85 90 95  
 Arg Trp Asp His Ser Asp Thr Met Gln Asp Asn Arg Trp Gln Leu Gly  
 100 105 110  
 Leu Lys Ile Lys Met Asn Tyr Met Ile Phe Asp Lys Leu Phe Asn Pro  
 115 120 125  
 Trp Ser Leu His Phe Leu Tyr Lys Thr Gly Thr Ile Leu Ile Pro Thr  
 130 135 140  
 Leu  
 145

<210> 1435  
<211> 46  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (45)  
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1435  
Ala Gly Ala Gln Trp His Asn His Ser Ser Leu Gln Pro Trp Asn Ser  
1 5 10 15  
Gln Ala Gln Val Ile Leu Pro Ser Ala Pro Ala Arg Val Ala Gly Thr  
20 25 30  
Pro Gly Met His His Tyr Asn Gln Leu Ile Phe Phe Xaa Phe  
35 40 45

<210> 1436  
<211> 95  
<212> PRT  
<213> Homo sapiens

<400> 1436  
Asn Ser Thr Met Ala Tyr Arg Gly Gln Gly Gln Lys Val Gln Lys Val  
1 5 10 15  
Met Val Gln Pro Ile Asn Leu Ile Phe Arg Tyr Leu Gln Asn Arg Ser  
20 25 30  
Arg Ile Gln Val Trp Leu Tyr Glu Gln Val Asn Met Arg Ile Glu Gly  
35 40 45  
Cys Ile Ile Gly Phe Asp Glu Tyr Met Asn Leu Val Leu Asp Asp Ala  
50 55 60  
Glu Glu Ile His Ser Lys Thr Lys Ser Arg Lys Gln Leu Gly Arg Ile  
65 70 75 80  
Met Leu Lys Gly Asp Asn Ile Thr Leu Leu Gln Ser Val Ser Asn  
85 90 95

<210> 1437  
<211> 113  
<212> PRT



<213> Homo sapiens

<220>

<221> SITE

<222> (20)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1437

Gln Gly Ala Leu Gly Ser Pro Val Pro Val Ala Val Ala Pro Leu Thr  
1 5 10 15

Pro Pro Ser Xaa Cys Pro Ala Pro Pro Leu Arg Pro Pro His Thr Pro  
20 25 30

Leu Ala Leu Thr Thr Cys Ile Ser Pro Ala Cys Val His Pro Pro Gly  
35 40 45

Trp Leu Thr His Ser His Ser His Thr Gln Ile Ser Gly Thr Asn Gly  
50 55 60

Pro Arg Val Leu Arg Thr Pro Ala Gln Gly Leu Cys Arg Ser Leu Pro  
65 70 75 80

His Ala Phe Pro Ser Leu Thr Lys Pro Pro Ala Ala Ser Phe Lys Leu  
85 90 95

Gly Ala Pro Ala Leu Gly Leu Ser Cys Ala Leu Phe Phe Phe Phe  
100 105 110

Phe

<210> 1438

<211> 122

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (16)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1438

Phe Leu His Thr Phe Asn Cys Ser Trp Ser Leu Thr Ser Pro Gly Xaa  
1 5 10 15

Arg Asp Val Leu Lys Gly Ser Gln Leu Trp Gln Val Thr Asp Ser Trp  
20 25 30

Glu Met Glu Arg Thr Lys Glu Tyr Ser Ser Cys Leu Thr Phe Leu Pro  
35 40 45  
Thr Ala Asp Ile Val Gln Ala Arg Val Met Glu Glu Leu Asn Leu Leu  
50 55 60  
Ala Ser Gln Ala Ala Pro Ile Pro Thr Ser Gln Cys Thr Ala Pro Pro  
65 70 75 80  
His Leu Phe Ser Pro Leu Ser Leu Thr Ser Pro Phe Ile Met Ser His  
85 90 95  
Lys Ser Gly Thr Val Gly Ser His Tyr Asn Leu Leu Cys His Arg Asp  
100 105 110  
Ser Ile Phe Leu Ile Ser Asn His Val Ser  
115 120

<210> 1439  
<211> 323  
<212> PRT  
<213> Homo sapiens

<400> 1439  
Phe Val Ser Pro Ala Ile Asp Ser Thr Arg Gly Asp Ser Ser Ser Leu  
1 5 10 15  
Val Ala Glu Leu Gln Glu Lys Leu Gln Glu Glu Lys Ala Lys Phe Leu  
20 25 30  
Glu Gln Leu Glu Glu Gln Glu Lys Arg Lys Asn Glu Glu Met Gln Asn  
35 40 45  
Val Arg Thr Ser Leu Ile Ala Glu Gln Gln Thr Asn Phe Asn Thr Val  
50 55 60  
Leu Thr Arg Glu Lys Met Arg Lys Glu Asn Ile Ile Asn Asp Leu Ser  
65 70 75 80  
Asp Lys Leu Lys Ser Thr Met Gln Gln Gln Glu Arg Asp Lys Asp Leu  
85 90 95  
Ile Glu Ser Leu Ser Glu Asp Arg Ala Arg Leu Leu Glu Glu Lys Lys  
100 105 110  
Lys Leu Glu Glu Glu Val Ser Lys Leu Arg Ser Ser Ser Phe Val Pro  
115 120 125  
Ser Pro Tyr Val Ala Thr Ala Pro Glu Leu Tyr Gly Ala Cys Ala Pro

130                      135                      140  
 Glu Leu Pro Gly Glu Ser Asp Arg Ser Ala Val Glu Thr Ala Asp Glu  
 145                      150                      155                      160  
 Gly Arg Val Asp Ser Ala Met Glu Thr Ser Met Met Ser Val Gln Glu  
                     165                      170                      175  
 Asn Ile His Met Leu Ser Glu Glu Lys Gln Arg Ile Met Leu Leu Glu  
                     180                      185                      190  
 Arg Thr Leu Gln Leu Lys Glu Glu Glu Asn Lys Arg Leu Asn Gln Arg  
                     195                      200                      205  
 Leu Met Ser Gln Ser Met Ser Ser Val Ser Ser Arg His Ser Glu Lys  
                     210                      215                      220  
 Ile Ala Ile Arg Asp Phe Gln Val Gly Asp Leu Val Leu Ile Ile Leu  
 225                      230                      235                      240  
 Asp Glu Arg His Asp Asn Tyr Val Leu Phe Thr Val Ser Pro Thr Leu  
                     245                      250                      255  
 Tyr Phe Leu His Ser Glu Ser Leu Pro Ala Leu Asp Leu Lys Pro Gly  
                     260                      265                      270  
 Glu Gly Ala Ser Gly Ala Ser Arg Arg Pro Trp Val Leu Gly Lys Val  
                     275                      280                      285  
 Met Glu Lys Glu Tyr Cys Gln Ala Lys Lys Ala Gln Asn Arg Phe Lys  
                     290                      295                      300  
 Val Pro Leu Gly Thr Lys Phe Tyr Arg Val Lys Ala Val Ser Trp Asn  
 305                      310                      315                      320  
 Lys Lys Val

&lt;210&gt; 1440

&lt;211&gt; 459

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1440

Thr Arg Trp Trp Gly Pro Val Leu Trp Ser Lys Ser Arg Pro Pro Gly  
 1                      5                      10                      15  
 Arg Thr Arg Gly Pro Ser Gly Trp Arg Val Gly Leu Thr Arg Thr Ser  
                     20                      25                      30

Arg Pro Ala Ser Pro Ser Ala Leu Arg Thr Gly Asp Gly Ser Ser Arg  
 35 40 45

Pro Gly Thr Pro Pro Ala Ser Pro Arg Val Phe Glu Val Arg Gly Gly  
 50 55 60

Ser Gly Ala Ser Ala Arg Arg Ser Ala Arg Ser Leu Pro Ala Leu Glu  
 65 70 75 80

Ser Ala Ile Met Asp Val Leu Ala Glu Ala Asn Gly Thr Phe Ala Leu  
 85 90 95

Asn Leu Leu Lys Thr Leu Gly Lys Asp Asn Ser Lys Asn Val Phe Phe  
 100 105 110

Ser Pro Met Ser Met Ser Cys Ala Leu Ala Met Val Tyr Met Gly Ala  
 115 120 125

Lys Gly Asn Thr Ala Ala Gln Met Ala Gln Ile Leu Ser Phe Asn Lys  
 130 135 140

Ser Gly Gly Gly Gly Asp Ile His Gln Gly Phe Gln Ser Leu Leu Thr  
 145 150 155 160

Glu Val Asn Lys Thr Gly Thr Gln Tyr Leu Leu Arg Met Ala Asn Arg  
 165 170 175

Leu Phe Gly Glu Lys Ser Cys Asp Phe Leu Ser Ser Phe Arg Asp Ser  
 180 185 190

Cys Gln Lys Phe Tyr Gln Ala Glu Met Glu Glu Leu Asp Phe Ile Ser  
 195 200 205

Ala Val Glu Lys Ser Arg Lys His Ile Asn Thr Trp Val Ala Glu Lys  
 210 215 220

Thr Glu Gly Lys Ile Ala Glu Leu Leu Ser Pro Gly Ser Val Asp Pro  
 225 230 235 240

Leu Thr Arg Leu Val Leu Val Asn Ala Val Tyr Phe Arg Gly Asn Trp  
 245 250 255

Asp Glu Gln Phe Asp Lys Glu Asn Thr Glu Glu Arg Leu Phe Lys Val  
 260 265 270

Ser Lys Asn Glu Glu Lys Pro Val Gln Met Met Phe Lys Gln Ser Thr  
 275 280 285

Phe Lys Lys Thr Tyr Ile Gly Glu Ile Phe Thr Gln Ile Leu Val Leu  
 290 295 300

Pro Tyr Val Gly Lys Glu Leu Asn Met Ile Ile Met Leu Pro Asp Glu  
305 310 315 320

Thr Thr Asp Leu Arg Thr Val Glu Lys Glu Leu Thr Tyr Glu Lys Phe  
325 330 335

Val Glu Trp Thr Arg Leu Asp Met Met Asp Glu Glu Glu Val Glu Val  
340 345 350

Ser Leu Pro Arg Phe Lys Leu Glu Glu Ser Tyr Asp Met Glu Ser Val  
355 360 365

Leu Arg Asn Leu Gly Met Thr Asp Ala Phe Glu Leu Gly Lys Ala Asp  
370 375 380

Phe Ser Gly Met Ser Gln Thr Asp Leu Ser Leu Ser Lys Val Val His  
385 390 395 400

Lys Ser Phe Val Glu Val Asn Glu Glu Gly Thr Glu Ala Ala Ala Ala  
405 410 415

Thr Ala Ala Ile Met Met Met Arg Cys Ala Arg Phe Val Pro Arg Phe  
420 425 430

Cys Ala Asp His Pro Phe Leu Phe Phe Ile Gln His Ser Lys Thr Asn  
435 440 445

Gly Ile Leu Phe Cys Gly Arg Phe Ser Ser Pro  
450 455

<210> 1441

<211> 113

<212> PRT

<213> Homo sapiens

<400> 1441

Leu Val Glu Ala Leu Lys Leu Gln Glu Gln Leu Lys Ala Pro Val Lys  
1 5 10 15

Thr Leu Ser Glu Gly Ile Lys Arg Lys Leu Cys Phe Val Leu Ser Ile  
20 25 30

Leu Gly Asn Pro Ser Val Val Leu Leu Asp Glu Leu Phe Thr Gly Met  
35 40 45

Asp Pro Glu Gly Gln Gln Gln Met Trp Gln Ile Leu Gln Ala Thr Ile  
50 55 60

Lys Asn Gln Glu Arg Gly Ala Leu Leu Thr Thr His Tyr Met Ser Glu  
 65 70 75 80

Ala Lys Ser Leu Cys Asp Arg Val Ala Ile Met Val Ser Gly Thr Leu  
 85 90 95

Arg Cys Ile Gly Ser Ile Gln Gln Leu Lys Ser Leu Val Lys Ile Ile  
 100 105 110

Tyr

<210> 1442

<211> 839

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (291)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (295)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (683)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1442

Ala Glu His Trp Gly Ala Ile Pro Pro Ala Gly Gly Gly Ala Val Gly  
 1 5 10 15

Ile Ser Glu Thr Phe Leu Gly Lys Lys Val Arg Thr Lys Thr Leu Ser  
 20 25 30

Glu Asp Asp Leu Lys Glu Ile Pro Ala Glu Gln Met Asp Phe Arg Ala  
 35 40 45

Asn Leu Gln Arg Gln Val Lys Pro Lys Thr Val Ser Glu Glu Glu Arg  
 50 55 60

Lys Val His Ser Pro Gln Gln Val Asp Phe Arg Ser Val Leu Ala Lys  
 65 70 75 80

Lys Gly Thr Ser Lys Thr Pro Val Pro Glu Lys Val Pro Pro Pro Lys

85					90					95					
Pro	Ala	Thr	Pro	Asp	Phe	Arg	Ser	Val	Leu	Gly	Gly	Lys	Lys	Lys	Leu
			100					105					110		
Pro	Ala	Glu	Asn	Gly	Ser	Ser	Ser	Ala	Glu	Thr	Leu	Asn	Ala	Lys	Ala
		115					120					125			
Val	Glu	Ser	Ser	Lys	Pro	Leu	Ser	Asn	Ala	Gln	Pro	Ser	Gly	Pro	Leu
		130					135					140			
Lys	Pro	Val	Gly	Asn	Ala	Lys	Pro	Ala	Glu	Thr	Leu	Lys	Pro	Met	Gly
		145					150					155			160
Asn	Ala	Lys	Pro	Ala	Glu	Thr	Leu	Lys	Pro	Met	Gly	Asn	Ala	Lys	Pro
				165					170					175	
Asp	Glu	Asn	Leu	Lys	Ser	Ala	Ser	Lys	Glu	Glu	Leu	Lys	Lys	Asp	Val
			180						185					190	
Lys	Asn	Asp	Val	Asn	Cys	Lys	Arg	Gly	His	Ala	Gly	Thr	Thr	Asp	Asn
			195					200					205		
Glu	Lys	Arg	Ser	Glu	Ser	Gln	Gly	Thr	Ala	Pro	Ala	Phe	Lys	Gln	Lys
			210				215					220			
Leu	Gln	Asp	Val	His	Val	Ala	Glu	Gly	Lys	Lys	Leu	Leu	Leu	Gln	Cys
			225				230					235			240
Gln	Val	Ser	Ser	Asp	Pro	Pro	Ala	Thr	Ile	Ile	Trp	Thr	Leu	Asn	Gly
				245					250					255	
Lys	Thr	Leu	Lys	Thr	Thr	Lys	Phe	Ile	Ile	Leu	Ser	Gln	Glu	Gly	Ser
			260					265					270		
Leu	Cys	Ser	Val	Ser	Ile	Glu	Lys	Ala	Leu	Pro	Glu	Asp	Arg	Gly	Leu
			275					280				285			
Tyr	Lys	Xaa	Val	Ala	Lys	Xaa	Asp	Ala	Gly	Gln	Ala	Glu	Cys	Ser	Cys
			290				295					300			
Gln	Val	Thr	Val	Asp	Asp	Ala	Pro	Ala	Ser	Glu	Asn	Thr	Lys	Ala	Pro
			305				310					315			320
Glu	Met	Lys	Ser	Arg	Arg	Pro	Lys	Ser	Ser	Leu	Pro	Pro	Val	Leu	Gly
				325				330					335		
Thr	Glu	Ser	Asp	Ala	Thr	Val	Lys	Lys	Lys	Pro	Ala	Pro	Lys	Thr	Pro
			340					345					350		
Pro	Lys	Ala	Ala	Met	Pro	Pro	Gln	Ile	Ile	Gln	Phe	Pro	Glu	Asp	Gln

355	360	365
Lys Val Arg Ala Gly Glu Ser Val Glu Leu Phe Gly Lys Val Thr Gly		
370	375	380
Thr Gln Pro Ile Thr Cys Thr Trp Met Lys Phe Arg Lys Gln Ile Gln		
385	390	395 400
Glu Ser Glu His Met Lys Val Glu Asn Ser Glu Asn Gly Ser Lys Leu		
405	410	415
Thr Ile Leu Ala Ala Arg Gln Glu His Cys Gly Cys Tyr Thr Leu Leu		
420	425	430
Val Glu Asn Lys Leu Gly Ser Arg Gln Ala Gln Val Asn Leu Thr Val		
435	440	445
Val Asp Lys Pro Asp Pro Pro Ala Gly Thr Pro Cys Ala Ser Asp Ile		
450	455	460
Arg Ser Ser Ser Leu Thr Leu Ser Trp Tyr Gly Ser Ser Tyr Asp Gly		
465	470	475 480
Gly Ser Ala Val Gln Ser Tyr Ser Ile Glu Ile Trp Asp Ser Ala Asn		
485	490	495
Lys Thr Trp Lys Glu Leu Ala Thr Cys Arg Ser Thr Ser Phe Asn Val		
500	505	510
Gln Asp Leu Leu Pro Asp His Glu Tyr Lys Phe Arg Val Arg Ala Ile		
515	520	525
Asn Val Tyr Gly Thr Ser Glu Pro Ser Gln Glu Ser Glu Leu Thr Thr		
530	535	540
Val Gly Glu Lys Pro Glu Glu Pro Lys Asp Glu Val Glu Val Ser Asp		
545	550	555 560
Asp Asp Glu Lys Glu Pro Glu Val Asp Tyr Arg Thr Val Thr Ile Asn		
565	570	575
Thr Glu Gln Lys Val Ser Asp Phe Tyr Asp Ile Glu Glu Arg Leu Gly		
580	585	590
Ser Gly Lys Phe Gly Gln Val Phe Arg Leu Val Glu Lys Lys Thr Arg		
595	600	605
Lys Val Trp Ala Gly Lys Phe Phe Lys Ala Tyr Ser Ala Lys Glu Lys		
610	615	620
Glu Asn Ile Arg Gln Glu Ile Ser Ile Met Asn Cys Leu His His Pro		



625                      630                      635                      640  
 Lys Leu Val Gln Cys Val Asp Ala Phe Glu Glu Lys Ala Asn Ile Val  
                                 645                      650                      655  
 Met Val Leu Glu Ile Val Ser Gly Gly Glu Leu Phe Glu Arg Ile Ile  
                                 660                      665                      670  
 Asp Glu Asp Phe Glu Leu Thr Glu Arg Glu Xaa Ile Lys Tyr Met Arg  
                                 675                      680                      685  
 Gln Ile Ser Glu Gly Val Glu Tyr Ile His Lys Gln Gly Ile Val His  
                                 690                      695                      700  
 Leu Asp Leu Lys Pro Glu Asn Ile Met Cys Val Asn Lys Thr Gly Thr  
 705                                  710                      715                      720  
 Arg Ile Lys Leu Ile Asp Phe Gly Leu Ala Arg Arg Leu Glu Asn Ala  
                                 725                      730                      735  
 Gly Ser Leu Lys Val Leu Phe Gly Thr Pro Glu Phe Val Ala Pro Glu  
                                 740                      745                      750  
 Val Ile Asn Tyr Glu Pro Ile Gly Tyr Ala Thr Asp Met Trp Ser Ile  
                                 755                      760                      765  
 Gly Val Ile Cys Tyr Ile Leu Val Ser Gly Leu Ser Pro Phe Met Gly  
                                 770                      775                      780  
 Asp Asn Asp Asn Glu Thr Leu Ala Asn Val Thr Ser Ala Thr Trp Asp  
 785                                  790                      795                      800  
 Phe Asp Asp Glu Ala Phe Asp Glu Ile Ser Asp Asp Ala Lys Asp Phe  
                                 805                      810                      815  
 Ile Ser Asn Leu Leu Lys Lys Asp Met Lys Asn Arg Leu Asp Cys Thr  
                                 820                      825                      830  
 His Ala Phe Ser Ile His Gly  
                                 835

<210> 1443  
 <211> 111  
 <212> PRT  
 <213> Homo sapiens

<400> 1443  
 Cys Ser Cys Thr Val Arg Ala Arg Arg Arg Leu Asn Arg Gly Leu Arg  
 1                      5                      10                      15

Arg Lys Gln His Ser Leu Leu Lys Arg Leu Arg Lys Ala Lys Lys Glu  
20 25 30

Ala Pro Pro Met Glu Lys Pro Glu Val Val Lys Thr His Leu Arg Asp  
35 40 45

Met Ile Ile Leu Pro Glu Met Val Gly Ser Met Val Gly Val Tyr Asn  
50 55 60

Gly Lys Thr Phe Asn Gln Val Glu Ile Lys Pro Glu Met Ile Gly His  
65 70 75 80

Tyr Leu Gly Glu Phe Ser Ile Thr Tyr Lys Pro Val Lys His Gly Arg  
85 90 95

Pro Gly Ile Gly Ala Thr His Ser Ser Arg Phe Ile Pro Leu Lys  
100 105 110

<210> 1444

<211> 531

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (6)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (446)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (474)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (502)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (504)

<223> Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1444

Glu Lys Ser Val Gln Xaa Ser Lys Arg Glu Ser Val Ser His Arg Ser  
1 5 10 15

Pro Ser Pro Glu Pro Ile Tyr Asn Ser Glu Gly Lys Arg Leu Asn Thr  
20 25 30

Arg Glu Phe Arg Thr Arg Lys Lys Leu Glu Glu Glu Arg His Asn Leu  
35 40 45

Ile Thr Glu Met Val Ala Leu Asn Pro Asp Phe Lys Pro Pro Ala Asp  
50 55 60

Tyr Lys Pro Pro Ala Thr Arg Val Ser Asp Lys Val Met Ile Pro Gln  
65 70 75 80

Asp Glu Tyr Pro Glu Ile Asn Phe Val Gly Leu Leu Ile Gly Pro Arg  
85 90 95

Gly Asn Thr Leu Lys Asn Ile Glu Lys Glu Cys Asn Ala Lys Ile Met  
100 105 110

Ile Arg Gly Lys Gly Ser Val Lys Glu Gly Lys Val Gly Arg Lys Asp  
115 120 125

Gly Gln Met Leu Pro Gly Glu Asp Glu Pro Leu His Ala Leu Val Thr  
130 135 140

Ala Asn Thr Met Glu Asn Val Lys Lys Ala Val Glu Gln Ile Arg Asn  
145 150 155 160

Ile Leu Lys Gln Gly Ile Glu Thr Pro Glu Asp Gln Asn Asp Leu Arg  
165 170 175

Lys Met Gln Leu Arg Glu Leu Ala Arg Leu Asn Gly Thr Leu Arg Glu  
180 185 190

Asp Asp Asn Arg Ile Leu Arg Pro Trp Gln Ser Ser Glu Thr Arg Ser  
195 200 205

Ile Thr Asn Thr Thr Val Cys Thr Lys Cys Gly Gly Ala Gly His Ile  
210 215 220

Ala Ser Asp Cys Lys Phe Gln Arg Pro Gly Asp Pro Gln Ser Ala Gln  
225 230 235 240

Asp Lys Ala Arg Met Asp Lys Glu Tyr Leu Ser Leu Met Ala Glu Leu  
245 250 255

Gly Glu Ala Pro Val Pro Ala Ser Val Gly Ser Thr Ser Gly Pro Ala  
260 265 270

Thr Thr Pro Leu Ala Ser Ala Pro Arg Pro Ala Ala Pro Ala Asn Asn  
275 280 285

Pro Pro Pro Pro Ser Leu Met Ser Thr Thr Gln Ser Arg Pro Pro Trp  
290 295 300

Met Asn Ser Gly Pro Ser Glu Ser Arg Pro Tyr His Gly Met His Gly  
305 310 315 320

Gly Gly Pro Gly Gly Pro Gly Gly Gly Pro His Ser Phe Pro His Pro  
325 330 335

Leu Pro Ser Leu Thr Gly Gly His Gly Gly His Pro Met Gln His Asn  
340 345 350

Pro Asn Gly Pro Pro Pro Pro Trp Met Gln Pro Pro Pro Pro Met  
355 360 365

Asn Gln Gly Pro His Pro Pro Gly His His Gly Pro Pro Pro Met Asp  
370 375 380

Gln Tyr Leu Gly Ser Thr Pro Val Gly Ser Gly Val Tyr Arg Leu His  
385 390 395 400

Gln Gly Lys Gly Met Met Pro Pro Pro Pro Met Gly Met Met Pro Pro  
405 410 415

Pro Pro Pro Pro Pro Ser Gly Gln Pro Pro Pro Pro Pro Ser Gly Pro  
420 425 430

Leu Pro Pro Trp Gln Gln Gln Gln Gln Gln Pro Pro Pro Xaa Pro Pro  
435 440 445

Pro Ser Ser Ser Met Ala Ser Ser Thr Pro Leu Pro Trp Gln Gln Asn  
450 455 460

Thr Thr Thr Thr Thr Thr Ser Ala Gly Xaa Gly Ser Ile Pro Pro Trp  
465 470 475 480

Gln Gln Gln Gln Ala Ala Ala Ala Ala Ser Pro Gly Ala Pro Gln Met  
485 490 495

Gln Gly Asn Pro Thr Xaa Gly Xaa Met Ala Leu Leu Gln Trp Ile Ser  
500 505 510

Thr Trp Glu Val Arg Leu Trp Ala Leu Gly Ser Ile Ala Cys Ile Lys  
515 520 525

Glu Lys Val  
530

<210> 1445  
<211> 99  
<212> PRT  
<213> Homo sapiens

<400> 1445  
Ser Thr Cys Arg Val Val Glu Val Gly Lys Gln Gln Gly Thr Leu Tyr  
1 5 10 15  
Asn Ala Arg Gln Leu Gln Tyr Gly Lys Asn Gly Pro Gly Pro Trp Asp  
20 25 30  
Lys Ile Arg Val Val Leu Thr Pro Arg Gly Arg Gly Gln Pro Ala Phe  
35 40 45  
Arg Val Ala Ser Ser Val Pro Leu Gln Ser Asp Cys Val His Leu Val  
50 55 60  
Gln Leu Met Ser Glu Ser Pro Ala Leu Gly Tyr Phe Ile Leu Val Arg  
65 70 75 80  
Thr Leu Thr Ser His Ile Gly Ser Ile Asn Ser Phe Gly Lys Glu Leu  
85 90 95  
Ile Ser Phe

<210> 1446  
<211> 65  
<212> PRT  
<213> Homo sapiens

<400> 1446  
Gln Pro Pro Gln Thr Phe Trp Gln Ala Leu Gln Leu Cys Tyr Phe Ile  
1 5 10 15  
Gln Leu Ile Leu Gln Ile Glu Ser Asn Gly His Ser Val Ser Phe Gly  
20 25 30  
Arg Met Asp Gln Tyr Leu Tyr Pro Tyr Tyr Arg Arg Asp Val Glu Leu  
35 40 45  
Asn Gln Thr Leu Asp Arg Glu His Ala Ile Glu Met Cys Ile Ala Ala  
50 55 60  
Gly

65

&lt;210&gt; 1447

&lt;211&gt; 189

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (116)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1447

Tyr Cys Ser Ala Ala Met Ala Glu Pro Gln Pro Pro Ser Gly Gly Leu  
1 5 10 15

Thr Asp Glu Ala Ala Leu Ser Cys Cys Ser Asp Ala Asp Pro Ser Thr  
20 25 30

Lys Asp Phe Leu Leu Gln Gln Thr Met Leu Arg Val Lys Asp Pro Lys  
35 40 45

Lys Ser Leu Asp Phe Tyr Thr Arg Val Leu Gly Met Thr Leu Ile Gln  
50 55 60

Lys Cys Asp Phe Pro Ile Met Lys Phe Ser Leu Tyr Phe Leu Ala Tyr  
65 70 75 80

Glu Asp Lys Asn Asp Ile Pro Lys Glu Lys Asp Glu Lys Ile Ala Trp  
85 90 95

Ala Leu Ser Arg Lys Ala Thr Leu Glu Leu Thr His Asn Trp Gly Thr  
100 105 110

Glu Asp Asp Xaa Thr Gln Ser Tyr His Asn Gly Asn Ser Asp Pro Arg  
115 120 125

Gly Phe Gly His Ile Gly Ile Ala Val Pro Asp Val Tyr Ser Ala Cys  
130 135 140

Lys Arg Phe Glu Glu Leu Gly Val Lys Phe Val Lys Lys Pro Asp Asp  
145 150 155 160

Gly Lys Met Lys Gly Leu Ala Phe Ile Gln Asp Pro Asp Gly Tyr Trp  
165 170 175

Ile Glu Ile Leu Asn Pro Asn Lys Met Ala Thr Leu Met  
180 185

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<210> 1448
<211> 219
<212> PRT
<213> Homo sapiens
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<400> 1448

Phe	Glu	Glu	Arg	Tyr	Thr	Phe	Glu	Ile	Pro	Phe	Leu	Glu	Ala	Gln	Arg	1	5	10	15
Arg	Thr	Leu	Leu	Leu	Thr	Val	Val	Asp	Phe	Asp	Lys	Phe	Ser	Arg	His	20	25	30	
Cys	Val	Ile	Gly	Lys	Val	Ser	Val	Pro	Leu	Cys	Glu	Val	Asp	Leu	Val	35	40	45	
Lys	Gly	Gly	His	Trp	Trp	Lys	Ala	Leu	Ile	Pro	Ser	Ser	Gln	Asn	Glu	50	55	60	
Val	Glu	Leu	Gly	Glu	Leu	Leu	Leu	Ser	Leu	Asn	Tyr	Leu	Pro	Ser	Ala	65	70	75	80
Gly	Arg	Leu	Asn	Val	Asp	Val	Ile	Arg	Ala	Lys	Gln	Leu	Leu	Gln	Thr	85	90	95	
Asp	Val	Ser	Gln	Gly	Ser	Asp	Pro	Phe	Val	Lys	Ile	Gln	Leu	Val	His	100	105	110	
Gly	Leu	Lys	Leu	Val	Lys	Thr	Lys	Lys	Thr	Ser	Phe	Leu	Arg	Gly	Thr	115	120	125	
Ile	Asp	Pro	Phe	Tyr	Asn	Glu	Ser	Phe	Ser	Phe	Lys	Val	Pro	Gln	Glu	130	135	140	
Glu	Leu	Glu	Asn	Ala	Ser	Leu	Val	Phe	Thr	Val	Phe	Gly	His	Asn	Met	145	150	155	160
Lys	Ser	Ser	Asn	Asp	Phe	Ile	Gly	Arg	Ile	Val	Ile	Gly	Gln	Tyr	Ser	165	170	175	
Ser	Gly	Pro	Ser	Glu	Thr	Asn	His	Trp	Arg	Arg	Met	Leu	Asn	Thr	His	180	185	190	
Arg	Thr	Ala	Val	Glu	Gln	Trp	His	Ser	Leu	Arg	Ser	Arg	Ala	Glu	Cys	195	200	205	
Asp	Arg	Val	Ser	Pro	Ala	Ser	Leu	Glu	Val	Thr						210	215		

<210> 1449  
<211> 44  
<212> PRT  
<213> Homo sapiens

<400> 1449  
Asp Trp Val Phe Lys Leu Ala Phe Val Asn Leu Ile Ala Leu Arg Leu  
1 5 10 15  
Pro Ser Asn Glu Lys Lys Ser Gln Asn Phe Tyr Leu Val Phe Val His  
20 25 30  
Phe Leu Leu Lys Cys Asn His Met Ile Leu Val Cys  
35 40

<210> 1450  
<211> 272  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (183)  
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1450  
Ser Thr Pro Cys Trp Pro Leu Pro Pro Val Trp Leu Gly Cys Gly Glu  
1 5 10 15  
Met Cys Leu Cys Val Gln Val Pro Glu Arg Asp Ser Val Ser Ser Val  
20 25 30  
Ser Ser Ala Thr Ser Ser Ser Ser Ser Ala His Ser Val Asp Ser Glu  
35 40 45  
Asp Met Tyr Ala Asp Leu Ala Ser Pro Val Ser Ser Ala Ser Ser Arg  
50 55 60  
Ser Pro Ala Pro Ala Gln Thr Arg Lys Glu Lys Gly Lys Ser Lys Lys  
65 70 75 80  
Glu Asp Gly Val Lys Glu Glu Lys Arg Lys Arg Asp Ser Ser Thr Gln  
85 90 95  
Pro Pro Lys Ser Ala Lys Pro Pro Ala Gly Gly Lys Ser Ser Gln Gln  
100 105 110  
Pro Ser Thr Pro Gln Gln Ala Pro Pro Gly Gln Pro Gln Gln Gly Thr



115	120	125
Phe Val Ala His Lys Glu Ile Lys Leu Thr Leu Leu Asn Lys Ala Ala		
130	135	140
Asp Lys Gly Ser Arg Lys Arg Tyr Glu Pro Ser Asp Lys Asp Arg Gln		
145	150	155 160
Ser Pro Pro Pro Ala Lys Arg Pro Asn Thr Ser Pro Asp Arg Gly Ser		
	165	170 175
Arg Asp Arg Lys Ser Gly Xaa Arg Leu Gly Ser Pro Lys Pro Glu Arg		
	180	185 190
Gln Arg Gly Gln Asn Ser Lys Ala Pro Ala Ala Pro Ala Asp Arg Lys		
	195	200 205
Arg Gln Leu Ser Pro Gln Ser Lys Ser Ser Ser Lys Val Thr Ser Val		
	210	215 220
Pro Gly Lys Ala Ser Asp Pro Gly Ala Ala Ser Thr Lys Ser Gly Lys		
	225	230 235 240
Ala Ser Thr Leu Ser Arg Arg Glu Glu Leu Leu Lys Gln Leu Lys Ala		
	245	250 255
Val Glu Asp Ala Ile Ala Arg Lys Arg Ala Lys Ile Pro Gly Lys Ala		
	260	265 270

&lt;210&gt; 1451

&lt;211&gt; 164

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (122)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (144)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

<222> (150)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1451

Val Met Ala Ala Cys Arg Tyr Cys Cys Ser Cys Leu Arg Leu Arg Pro  
1 5 10 15

Leu Ser Asp Gly Pro Phe Leu Leu Pro Arg Arg Asp Arg Ala Leu Thr  
20 25 30

Gln Leu Gln Val Arg Ala Leu Trp Ser Ser Ala Gly Ser Arg Ala Val  
35 40 45

Ala Val Asp Leu Gly Asn Arg Lys Leu Glu Ile Ser Ser Gly Lys Leu  
50 55 60

Ala Arg Phe Ala Asp Gly Ser Ala Val Val Gln Ser Gly Asp Thr Ala  
65 70 75 80

Val Met Val Thr Ala Val Ser Lys Thr Lys Pro Ser Pro Ser Gln Phe  
85 90 95

Met Pro Leu Val Val Asp Tyr Arg Gln Lys Ala Ala Ala Ala Gly Arg  
100 105 110

Ile Pro Thr Asn Tyr Leu Arg Arg Glu Xaa Gly Thr Ser Asp Lys Glu  
115 120 125

Ile Leu Thr Ser Arg Ile Ile Asp Arg Ser Ile Arg Pro Leu Phe Xaa  
130 135 140

Ala Gly Tyr Phe Tyr Xaa Thr Gln Val Leu Cys Asn Leu Leu Ala Val  
145 150 155 160

Asp Gly Val Asn

<210> 1452

<211> 206

<212> PRT

<213> Homo sapiens

<400> 1452

Ala Asp Cys Val Phe Val Glu Asp Val Ala Val Val Cys Glu Glu Thr  
1 5 10 15

Ala Leu Ile Thr Arg Pro Gly Ala Pro Ser Arg Arg Lys Glu Val Asp  
20 25 30

Met Met Lys Glu Ala Leu Glu Lys Leu Gln Leu Asn Ile Val Glu Met  
35 40 45

Lys Asp Glu Asn Ala Thr Leu Asp Gly Gly Asp Val Leu Phe Thr Gly  
50 55 60

Arg Glu Phe Phe Val Gly Leu Ser Lys Arg Thr Asn Gln Arg Gly Ala  
65 70 75 80

Glu Ile Leu Ala Asp Thr Phe Lys Asp Tyr Ala Val Ser Thr Val Pro  
85 90 95

Val	Ala	Asp	Gly	Leu	His	Leu	Lys	Ser	Phe	Cys	Ser	Met	Ala	Gly	Pro
			100					105					110		

Asn Leu Ile Ala Ile Gly Ser Ser Glu Ser Ala Gln Lys Ala Leu Lys  
115 120 125

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Ile Met Gln Gln Met Ser Asp His Arg Tyr Asp Lys Leu Thr Val Pro
      130                      135                      140

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Asp Asp Ile Ala Ala Asn Cys Ile Tyr Leu Asn Ile Pro Asn Lys Gly  
145 150 155 160

His Val Leu Leu His Arg Thr Pro Glu Glu Tyr Pro Glu Ser Ala Lys  
165 170 175

Val Tyr Glu Lys Leu Lys Asp His Met Leu Ile Pro Val Ser Met Ser  
180 185 190

Glu Leu Glu Lys Val Asp Gly Leu Leu Thr Cys Cys Gln Phe  
195 200 205

<210> 1453

<211> 645

<212> PRT

<213> Homo sapiens

**<220>**

<221> SITE

**<222> (608)**

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1453

Ala His Ala Ser Gly Lys Lys Pro Pro Asn Arg Pro Gly Ile Thr Phe  
1 5 10 15

Glu Ile Gly Ala Arg Leu Glu Ala Leu Asp Tyr Leu Gln Lys Trp Tyr  
20 25 30

Pro	Ser	Arg	Ile	Glu	Lys	Ile	Asp	Tyr	Glu	Glu	Gly	Lys	Met	Leu	Val
		35						40						45	
His	Phe	Glu	Arg	Trp	Ser	His	Arg	Tyr	Asp	Glu	Trp	Ile	Tyr	Trp	Asp
	50					55					60				
Ser	Asn	Arg	Leu	Arg	Pro	Leu	Glu	Arg	Pro	Ala	Leu	Arg	Lys	Glu	Gly
65					70					75					80
Leu	Lys	Asp	Glu	Glu	Asp	Phe	Phe	Asp	Phe	Lys	Ala	Gly	Glu	Glu	Val
				85					90					95	
Leu	Ala	Arg	Trp	Thr	Asp	Cys	Arg	Tyr	Tyr	Pro	Ala	Lys	Ile	Glu	Ala
			100					105					110		
Ile	Asn	Lys	Glu	Gly	Thr	Phe	Thr	Val	Gln	Phe	Tyr	Asp	Gly	Val	Ile
		115					120					125			
Arg	Cys	Leu	Lys	Arg	Met	His	Ile	Lys	Ala	Met	Pro	Glu	Asp	Ala	Lys
		130				135					140				
Gly	Gln	Asp	Trp	Ile	Ala	Leu	Val	Lys	Ala	Ala	Ala	Ala	Ala	Ala	Ala
145					150					155					160
Lys	Asn	Lys	Thr	Gly	Ser	Lys	Pro	Arg	Thr	Ser	Ala	Asn	Ser	Asn	Lys
				165					170					175	
Asp	Lys	Asp	Lys	Asp	Glu	Arg	Lys	Trp	Phe	Lys	Val	Pro	Ser	Lys	Lys
			180					185					190		
Glu	Glu	Thr	Ser	Thr	Cys	Ile	Ala	Thr	Pro	Asp	Val	Glu	Lys	Lys	Glu
		195					200					205			
Asp	Leu	Pro	Thr	Ser	Ser	Glu	Thr	Phe	Gly	Leu	His	Val	Glu	Asn	Val
	210					215					220				
Pro	Lys	Met	Val	Phe	Pro	Gln	Pro	Glu	Ser	Thr	Leu	Ser	Asn	Lys	Arg
225					230					235					240
Lys	Asn	Asn	Gln	Gly	Asn	Ser	Phe	Gln	Ala	Lys	Arg	Ala	Arg	Leu	Asn
			245						250					255	
Lys	Ile	Thr	Gly	Leu	Leu	Ala	Ser	Lys	Ala	Val	Gly	Val	Asp	Gly	Ala
			260					265					270		
Glu	Lys	Lys	Glu	Asp	Tyr	Asn	Glu	Thr	Ala	Pro	Met	Leu	Glu	Gln	Ala
		275					280					285			
Ile	Ser	Pro	Lys	Pro	Gln	Ser	Gln	Lys	Lys	Asn	Glu	Ala	Asp	Ile	Ser
290					295						300				

Ser Ser Ala Asn Thr Gln Lys Pro Ala Leu Leu Ser Ser Thr Leu Ser  
 305 310 315 320  
 Ser Gly Lys Ala Arg Ser Lys Lys Cys Lys His Glu Ser Gly Asp Ser  
 325 330 335  
 Ser Gly Cys Ile Lys Pro Pro Lys Ser Pro Leu Ser Pro Glu Leu Ile  
 340 345 350  
 Gln Val Glu Asp Leu Thr Leu Val Ser Gln Leu Ser Ser Ser Val Ile  
 355 360 365  
 Asn Lys Thr Ser Pro Pro Gln Pro Val Asn Pro Pro Arg Pro Phe Lys  
 370 375 380  
 His Ser Glu Arg Arg Arg Arg Ser Gln Arg Leu Ala Thr Leu Pro Met  
 385 390 395 400  
 Pro Asp Asp Ser Val Glu Lys Val Ser Ser Pro Ser Pro Ala Thr Asp  
 405 410 415  
 Gly Lys Val Phe Ser Ile Ser Ser Gln Asn Gln Gln Glu Ser Ser Val  
 420 425 430  
 Pro Glu Val Pro Asp Val Ala His Leu Pro Leu Glu Lys Leu Gly Pro  
 435 440 445  
 Cys Leu Pro Leu Asp Leu Ser Arg Gly Ser Glu Val Thr Ala Pro Val  
 450 455 460  
 Ala Ser Asp Ser Ser Tyr Arg Asn Glu Cys Pro Arg Ala Glu Lys Glu  
 465 470 475 480  
 Asp Thr Gln Met Leu Pro Asn Pro Ser Ser Lys Ala Ile Ala Asp Gly  
 485 490 495  
 Arg Gly Ala Pro Ala Ala Ala Gly Ile Ser Lys Thr Glu Lys Lys Val  
 500 505 510  
 Lys Leu Glu Asp Lys Ser Ser Thr Ala Phe Gly Lys Arg Lys Glu Lys  
 515 520 525  
 Asp Lys Glu Arg Arg Glu Lys Arg Asp Lys Asp His Tyr Arg Pro Lys  
 530 535 540  
 Gln Lys Lys Lys Lys Lys Lys Lys Lys Lys Ser Lys Gln His Asp Tyr  
 545 550 555 560  
 Ser Asp Tyr Glu Asp Ser Ser Leu Glu Phe Leu Glu Arg Cys Ser Ser  
 565 570 575

Pro Leu Thr Arg Ser Ser Gly Ser Ser Leu Ala Ser Arg Ser Met Phe  
                   580                                  585                                  590

Thr Glu Lys Thr Thr Thr Tyr Gln Tyr Pro Arg Ala Ile Leu Ser Xaa  
                   595                                  600                                  605

Asp Leu Ser Gly Glu Ser Met Cys Asn His Val Met Val Lys Thr Arg  
           610                                  615                                  620

Leu Thr Ile Pro Lys Cys Val Thr Glu Asn Lys Thr Tyr Ser Val Lys  
   625                                  630                                  635                                  640

Ser Met Arg Phe Lys  
                   645

<210> 1454  
 <211> 69  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (8)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 1454  
 Leu Val Ile Tyr Ser Trp His Xaa Phe Phe Ser Phe Gly Phe Ala Trp  
   1                  5                                  10                                  15

Leu Phe Leu Gln Val Leu Ser Arg Tyr His Ser Ala Asn His Cys Tyr  
                   20                                  25                                  30

Arg Met Val Thr Ser Phe Val Leu Thr Val Gln Gln Gln Ile Trp Val  
           35                                  40                                  45

Arg Leu Asn Leu Ser Val Asn Phe Phe Phe Trp Cys Phe Phe Gly Leu  
   50                                  55                                  60

Met Thr Val Ser Leu  
   65

<210> 1455  
 <211> 230  
 <212> PRT  
 <213> Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (150)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (152)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1455

Leu Ala Gly Pro Arg Arg Trp Arg Val Ser Arg Pro Glu Ala Tyr Arg  
1 5 10 15

Ser Arg Trp Arg Gly Arg Ala Gly Gln Gly Phe Gly Leu Arg Arg Arg  
20 25 30

Glu Met Ala Ala Gly Gly Arg Met Glu Asp Gly Ser Leu Asp Ile Thr  
35 40 45

Gln Ser Ile Glu Asp Asp Pro Leu Leu Asp Ala Gln Leu Leu Pro His  
50 55 60

His Ser Leu Gln Ala His Phe Arg Pro Arg Phe His Pro Leu Pro Thr  
65 70 75 80

Val Ile Ile Val Asn Leu Leu Trp Phe Ile His Leu Val Phe Val Val  
85 90 95

Leu Ala Phe Leu Thr Gly Val Leu Cys Ser Tyr Pro Asn Pro Asn Glu  
100 105 110

Asp Lys Cys Pro Gly Asn Tyr Thr Asn Pro Leu Lys Val Gln Thr Val  
115 120 125

Ile Ile Leu Gly Lys Val Ile Leu Trp Ile Leu His Leu Leu Leu Glu  
130 135 140

Cys Tyr Ile Gln Tyr Xaa His Xaa Lys Ile Arg Asn Arg Gly Tyr Asn  
145 150 155 160

Leu Ile Tyr Arg Ser Thr Arg His Leu Lys Arg Leu Ala Leu Met Ile  
165 170 175

Gln Ser Ser Gly Asn Thr Val Leu Leu Leu Ile Leu Cys Met Gln His  
180 185 190

Ser Phe Pro Glu Pro Gly Arg Leu Tyr Leu Asp Leu Ile Leu Ala Ile  
195 200 205

Leu Ala Leu Glu Leu Ile Cys Ser Leu Ile Cys Leu Leu Ile Tyr Thr

210

215

220

Val Lys Ile Pro Glu Ile

225

230

&lt;210&gt; 1456

&lt;211&gt; 71

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (10)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1456

Phe Phe Phe Phe Phe Ser Ile Ile Phe Xaa Gln Lys Gly Lys Lys Pro  
1 5 10 15

Phe Lys Ser Leu Arg Asn Leu Lys Ile Asp Leu Asp Leu Thr Ala Glu  
20 25 30

Gly Asp Leu Asn Ile Ile Met Ala Leu Ala Glu Lys Ile Lys Pro Gly  
35 40 45

Leu His Ser Phe Ile Phe Gly Arg Pro Phe Tyr Thr Ser Val Gln Glu  
50 55 60

Arg Asp Val Leu Met Thr Phe  
65 70

&lt;210&gt; 1457

&lt;211&gt; 51

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1457

Glu Tyr Asn Ser Val Asn Ala Asn Met Ile Ala Thr Leu Phe Thr Ser  
1 5 10 15

Leu Leu Leu Arg Pro Pro Pro Asn Leu Met Ala Arg Gln Thr Pro Ser  
20 25 30

Asp Arg Gln Arg Ala Ile Gln Phe Leu Leu Gly Phe Leu Leu Gly Ser  
35 40 45

Glu Glu Asp



50

<210> 1458  
 <211> 260  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (4)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (84)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 1458  
 Pro Arg Leu Xaa Gly Asp Phe Val Ile Arg Pro Pro Gly Ser Gly Glu  
           1                  5                  10                  15  
 Lys Glu Pro His Pro Phe Ser Leu Cys His His Phe Gly His Pro Ala  
                   20                  25                  30  
 Gly Leu Val Leu Gly Phe Ala Leu Thr Ser Arg Lys Asp Ala Asn Pro  
           35                  40                  45  
 Ser Leu Thr Pro Ala Arg Ala Ala Thr Cys Leu Cys Arg Gly Asp Pro  
           50                  55                  60  
 Ser Leu Met Thr Leu Arg Cys Leu Glu Pro Ser Gly Asn Gly Gly Glu  
           65                  70                  75                  80  
 Gly Thr Arg Xaa Gln Trp Gly Thr Ala Gly Ser Ala Glu Glu Pro Ser  
                   85                  90                  95  
 Pro Gln Ala Ala Arg Leu Ala Lys Ala Leu Arg Glu Leu Gly Gln Thr  
           100                  105                  110  
 Gly Trp Tyr Trp Gly Ser Met Thr Val Asn Glu Ala Lys Glu Lys Leu  
           115                  120                  125  
 Lys Glu Ala Pro Glu Gly Thr Phe Leu Ile Arg Asp Ser Ser His Ser  
           130                  135                  140  
 Asp Tyr Leu Leu Thr Ile Ser Val Lys Thr Ser Ala Gly Pro Thr Asn  
           145                  150                  155                  160  
 Leu Arg Ile Glu Tyr Gln Asp Gly Lys Phe Arg Leu Asp Ser Ile Ile

165 170 175  
 Cys Val Lys Ser Lys Leu Lys Gln Phe Asp Ser Val Val His Leu Ile  
 180 185 190  
 Asp Tyr Tyr Val Gln Met Cys Lys Asp Lys Arg Thr Gly Pro Glu Ala  
 195 200 205  
 Pro Arg Asn Gly Thr Val His Leu Tyr Leu Thr Lys Pro Leu Tyr Thr  
 210 215 220  
 Ser Ala Pro Ser Leu Gln His Leu Cys Arg Leu Thr Ile Asn Lys Cys  
 225 230 235 240  
 Thr Gly Ala Ile Trp Gly Leu Pro Leu Pro Thr Arg Leu Lys Asp Tyr  
 245 250 255  
 Leu Gly Arg Ile  
 260

<210> 1459  
 <211> 145  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (11)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 1459  
 Ala Glu Arg Ser Thr Cys Ser Arg Ser Arg Xaa Ala Arg Ala Ala Ala  
 1 5 10 15  
 Pro Leu Pro Gly Gly Lys Gly Ser Gly Ile Phe Asp Glu Ser Thr Pro  
 20 25 30  
 Val Gln Thr Arg Gln His Leu Asn Pro Pro Gly Gly Lys Thr Ser Asp  
 35 40 45  
 Ile Phe Gly Ser Pro Val Thr Ala Thr Ser Arg Leu Ala His Pro Asn  
 50 55 60  
 Lys Pro Lys Asp His Val Phe Leu Cys Glu Gly Glu Glu Pro Lys Ser  
 65 70 75 80  
 Asp Leu Lys Ala Ala Arg Ser Ile Pro Ala Gly Ala Glu Pro Gly Glu  
 85 90 95

Lys Gly Ser Ala Arg Lys Ala Gly Pro Ala Lys Glu Gln Glu Pro Met  
 100 105 110

Pro Thr Val Asp Ser His Glu Pro Arg Leu Gly Pro Arg Pro Arg Ser  
 115 120 125

His Asn Lys Val Leu Asn Pro Pro Gly Gly Lys Ser Ser Ile Ser Phe  
 130 135 140

Tyr  
 145

<210> 1460

<211> 113

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (15)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (34)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1460

Pro Ser Ile Tyr Asp Ile Leu Leu Leu Ile Ile Leu Trp Leu Xaa Ser  
 1 5 10 15

Arg Met Asp Val Glu Ser Cys Ser Gln Arg Glu Asp Arg Leu Lys Arg  
 20 25 30

Ala Xaa Ser Ala Lys Ser Ala Asn Ala Cys Asn Asn Cys Lys Cys Ser  
 35 40 45

Val Ala Thr Cys Arg Leu Asn Ser Ala Gly Pro Glu Phe Cys Ile Arg  
 50 55 60

Gly Leu Gly Tyr Ser Pro Asp Lys Gly Trp Arg His Arg Met Leu Glu  
 65 70 75 80

Phe Ser Gly His Ser Gly Lys Gly Pro Leu Cys Arg Ala Val Thr Val  
 85 90 95

Ser Cys Pro Ile Gly Pro Phe Pro Pro Val Lys Cys Lys Ser Gln Glu  
 100 105 110

Ser

&lt;210&gt; 1461

&lt;211&gt; 268

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1461

Thr Thr Phe Arg Ala Lys Pro Gly Cys Cys Cys Ser Gly Gly Glu Asp  
1 5 10 15

Arg Gly Thr Ala Met Ala Glu Ser Ser Glu Ser Phe Thr Met Ala Ser  
20 25 30

Ser Pro Ala Gln Arg Arg Arg Gly Asn Asp Pro Leu Thr Ser Ser Pro  
35 40 45

Gly Arg Ser Ser Arg Arg Thr Asp Ala Leu Thr Ser Ser Pro Gly Arg  
50 55 60

Asp Leu Pro Pro Phe Glu Asp Glu Ser Glu Gly Leu Leu Gly Thr Glu  
65 70 75 80

Gly Pro Leu Glu Glu Glu Glu Asp Gly Glu Glu Leu Ile Gly Asp Gly  
85 90 95

Met Glu Arg Asp Tyr Arg Ala Ile Pro Glu Leu Asp Ala Tyr Glu Ala  
100 105 110

Glu Gly Leu Ala Leu Asp Asp Glu Asp Val Glu Glu Leu Thr Ala Ser  
115 120 125

Gln Arg Glu Ala Ala Glu Arg Ala Met Arg His Val Thr Gly Arg Leu  
130 135 140

Ala Gly Ala Trp Ala Ala Cys Ala Val Gly Ser Cys Met Thr Ala Met  
145 150 155 160

Arg Arg Thr Arg Ser Ala Leu Pro Ala Ser Ala Ala Ser Gly Ala Ala  
165 170 175

Thr Glu Asp Gly Glu Glu Asp Glu Glu Met Ile Glu Ser Ile Glu Asn  
180 185 190

Leu Glu Asp Leu Lys Gly His Ser Val Arg Glu Trp Val Ser Met Ala  
195 200 205

Gly Pro Arg Leu Glu Ile His His Arg Phe Lys Asn Phe Leu Arg Thr

210

215

220

His Val Asp Ser His Gly His Asn Val Phe Lys Glu Arg Ile Ser Asp  
 225 230 235 240

Met Cys Lys Glu Asn Arg Glu Ser Leu Val Val Asn Tyr Glu Asp Thr  
 245 250 255

Gly Ser Gln Gly Ala Arg Ala Gly Leu Leu Pro Ala  
 260 265

&lt;210&gt; 1462

&lt;211&gt; 393

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (149)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1462

Lys Ile Arg Lys Gln Ile Asn Ile Asn Asn Pro Phe Val Phe Lys His  
 1 5 10 15

Ile Ser Asn Leu Lys Ser Met Asp His Phe Asp Asp Ile Gly Pro Ser  
 20 25 30

Val Val Met Ala Ser Pro Gly Met Met Gln Ser Gly Leu Ser Arg Glu  
 35 40 45

Leu Phe Glu Ser Trp Cys Thr Asp Lys Arg Asn Gly Val Ile Ile Ala  
 50 55 60

Gly Tyr Cys Val Glu Gly Thr Leu Ala Lys His Ile Met Ser Glu Pro  
 65 70 75 80

Glu Glu Ile Thr Thr Met Ser Gly Gln Lys Leu Pro Leu Lys Met Ser  
 85 90 95

Val Asp Tyr Ile Ser Phe Ser Ala His Thr Asp Tyr Gln Gln Thr Ser  
 100 105 110

Glu Phe Ile Arg Ala Leu Lys Pro Pro His Val Ile Leu Val His Gly  
 115 120 125

Glu Gln Asn Glu Met Ala Arg Leu Lys Ala Ala Leu Ile Arg Glu Tyr  
 130 135 140

Glu Asp Asn Asp Xaa Val His Ile Glu Val His Asn Pro Arg Asn Thr  
145 150 155 160

Glu Ala Val Thr Leu Asn Phe Arg Gly Glu Lys Leu Ala Lys Val Met  
165 170 175

Gly Phe Leu Ala Asp Lys Lys Pro Glu Gln Gly Gln Arg Val Ser Gly  
180 185 190

Ile Leu Val Lys Arg Asn Phe Asn Tyr His Ile Leu Ser Pro Cys Asp  
195 200 205

Leu Ser Asn Tyr Thr Asp Leu Ala Met Ser Thr Val Lys Gln Thr Gln  
210 215 220

Ala Ile Pro Tyr Thr Gly Pro Phe Asn Leu Leu Cys Tyr Gln Leu Gln  
225 230 235 240

Lys Leu Thr Gly Asp Val Glu Glu Leu Glu Ile Gln Glu Lys Pro Ala  
245 250 255

Leu Lys Val Phe Lys Asn Ile Thr Val Ile Gln Glu Pro Gly Met Val  
260 265 270

Val Leu Glu Trp Leu Ala Asn Pro Ser Asn Asp Met Tyr Ala Asp Thr  
275 280 285

Val Thr Thr Val Ile Leu Glu Val Gln Ser Asn Pro Lys Ile Arg Lys  
290 295 300

Gly Ala Val Gln Lys Val Ser Lys Lys Leu Glu Met His Val Tyr Ser  
305 310 315 320

Lys Arg Leu Glu Ile Met Leu Gln Asp Ile Phe Gly Glu Asp Cys Val  
325 330 335

Ser Val Lys Asp Asp Ser Ile Leu Ser Val Thr Val Asp Gly Lys Thr  
340 345 350

Ala Asn Leu Asn Leu Glu Thr Arg Thr Val Glu Cys Glu Glu Gly Ser  
355 360 365

Glu Asp Asp Glu Ser Leu Arg Glu Met Val Glu Leu Ala Ala Gln Arg  
370 375 380

Leu Tyr Glu Ala Leu Thr Pro Val His  
385 390

&lt;210&gt; 1463

<211> 163  
<212> PRT  
<213> Homo sapiens

<400> 1463

Leu Leu Asp Phe Pro Ala Leu Pro Lys Phe Val Leu Ala Gln Ser Pro  
1 5 10 15  
Lys Ala Gly Lys Pro Ser Thr Met Thr Ser Met Thr Gln Ser Leu Arg  
20 25 30  
Glu Val Ile Lys Ala Met Thr Lys Ala Arg Asn Phe Glu Arg Val Leu  
35 40 45  
Gly Lys Ile Thr Leu Val Ser Ala Ala Pro Gly Lys Val Ile Cys Glu  
50 55 60  
Met Lys Val Glu Glu Glu His Thr Asn Ala Ile Gly Thr Leu His Gly  
65 70 75 80  
Gly Leu Thr Ala Thr Leu Val Asp Asn Ile Ser Thr Met Ala Leu Leu  
85 90 95  
Cys Thr Glu Arg Gly Ala Pro Gly Val Ser Val Asp Met Asn Ile Thr  
100 105 110  
Tyr Met Ser Pro Ala Lys Leu Gly Glu Asp Ile Val Ile Thr Ala His  
115 120 125  
Val Leu Lys Gln Gly Lys Thr Leu Ala Phe Thr Ser Val Asp Leu Thr  
130 135 140  
Asn Lys Ala Thr Gly Lys Leu Ile Ala Gln Gly Arg His Thr Lys His  
145 150 155 160  
Leu Gly Asn

<210> 1464  
<211> 94  
<212> PRT  
<213> Homo sapiens

<400> 1464

Trp Cys Cys Phe Arg Thr Val Phe Ser Tyr Pro Phe Arg Leu Val Phe  
1 5 10 15  
Cys Met Arg His His Cys Lys Lys Ile Leu Ser Leu Gln Lys Tyr Phe  
20 25 30

Ile Thr Lys Glu Gln Lys Gln Lys Lys Leu Lys Leu His Trp Leu Lys  
35 40 45

Tyr Ser Phe Gln Gln Leu Ser Phe Leu Ser Thr Leu Met Ala Thr Pro  
50 55 60

Pro	Arg	Val	Glu	Val	Thr	Val	Val	Cys	Thr	Gln	Val	Val	Pro	Ile	Lys
65					70					75					80

Thr Pro Ser Phe Glu Pro Asn Tyr Val His Phe Val Ile Asp  
85 90

<210> 1465

<211> 183

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

$\langle 222 \rangle$  (7)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

&lt;221&gt; SITE

$\langle 222 \rangle$  (22)

<223> Xaa equals any of the naturally occurring L-amino acids

 $\langle 220 \rangle$ 

<221> SITE

<222> (25)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1465

Gln Val Glu Ile His Tyr Xaa Phe Asp Thr Leu Ile Glu Trp Trp Arg  
1 5 10 15

Glu Lys Asn Gly Ser Xaa Cys Ser Xaa Leu Ile Ile Val Leu Asp Ser  
20 25 30

Glu Asn Ser Thr Pro Trp Val Lys Glu Val Arg Lys Ile Asn Asp Gln  
35 40 45

Tyr Ile Ala Val Gln Gly Ala Glu Leu Ile Lys Thr Val Asp Ile Glu  
50 55 60

Glu Ala Asp Pro Pro Gln Leu Gly Asp Phe Thr Lys Asp Trp Val Glu  
65 70 75 80



Tyr Asn Cys Asn Ser Ser Asn Asn Ile Cys Trp Thr Glu Lys Gly Arg  
                     85                    90                    95

Thr Val Lys Ala Val Tyr Gly Val Ser Lys Arg Trp Ser Asp Tyr Thr  
                     100                    105                    110

Leu His Leu Pro Thr Gly Ser Asp Val Ala Lys His Trp Met Leu His  
                     115                    120                    125

Phe Pro Arg Ile Thr Tyr Pro Leu Val His Leu Ala Asn Trp Leu Cys  
                     130                    135                    140

Gly Leu Asn Leu Phe Trp Ile Cys Lys Thr Cys Phe Arg Cys Leu Lys  
                     145                    150                    155                    160

Arg Leu Lys Met Ser Trp Phe Leu Pro Thr Val Leu Asp Thr Gly Gln  
                     165                    170                    175

Gly Phe Lys Leu Val Lys Ser  
                     180

<210> 1466

<211> 146

<212> PRT

<213> Homo sapiens

<400> 1466

Arg Asp Gly Val Trp Ser Val Gln Val Arg Gly Gln Gly Glu Val Glu  
                     1                    5                    10                    15

Asn Gly Arg Cys Ile Thr Lys Leu Glu Asn Met Gly Phe Arg Val Gly  
                     20                    25                    30

Gln Gly Leu Ile Glu Arg Phe Thr Lys Asp Thr Ala Arg Phe Lys Asp  
                     35                    40                    45

Glu Leu Asp Ile Met Lys Phe Ile Cys Lys Asp Phe Trp Thr Thr Val  
                     50                    55                    60

Phe Lys Lys Gln Ile Asp Asn Leu Arg Thr Asn His Gln Gly Ile Tyr  
                     65                    70                    75                    80

Val Leu Gln Asp Asn Lys Phe Arg Leu Leu Thr Gln Met Ser Ala Gly  
                     85                    90                    95

Lys Gln Tyr Leu Glu His Ala Ser Lys Tyr Leu Ala Phe Thr Cys Gly  
                     100                    105                    110

Leu Ile Arg Gly Gly Leu Ser Asn Leu Gly Ile Lys Ser Ile Val Thr

115

120

125

Ala Glu Val Ser Ser Met Pro Ala Cys Lys Phe Gln Val Met Ile Gln  
 130 135 140

Lys Leu  
 145

&lt;210&gt; 1467

&lt;211&gt; 277

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1467

Ile Arg His Ser His Thr Gly Gln Gly Ser Cys Trp Val Ala Thr Leu  
 1 5 10 15

Ala Ser Ala Met Ile Pro Pro Ala Asp Ser Leu Leu Lys Tyr Asp Thr  
 20 25 30

Pro Val Leu Val Ser Arg Asn Thr Glu Lys Arg Ser Pro Lys Ala Arg  
 35 40 45

Leu Leu Lys Val Ser Pro Gln Gln Pro Gly Pro Ser Gly Ser Ala Pro  
 50 55 60

Gln Pro Pro Lys Thr Lys Leu Pro Ser Thr Pro Cys Val Pro Asp Pro  
 65 70 75 80

Thr Lys Gln Ala Glu Glu Ile Leu Asn Ala Ile Leu Pro Pro Arg Glu  
 85 90 95

Trp Val Glu Asp Thr Gln Leu Trp Ile Gln Gln Val Ser Ser Thr Pro  
 100 105 110

Ser Thr Arg Met Asp Val Val His Leu Gln Glu Gln Leu Asp Leu Lys  
 115 120 125

Leu Gln Gln Arg Gln Ala Arg Glu Thr Gly Ile Cys Pro Val Arg Arg  
 130 135 140

Glu Leu Tyr Ser Gln Cys Phe Asp Glu Leu Ile Arg Glu Val Thr Ile  
 145 150 155 160

Asn Cys Ala Glu Arg Gly Leu Leu Leu Leu Arg Val Arg Asp Glu Ile  
 165 170 175

Arg Met Thr Ile Ala Ala Tyr Gln Thr Leu Tyr Glu Ser Ser Val Ala  
 180 185 190

Phe Gly Met Arg Lys Ala Leu Gln Ala Glu Gln Gly Lys Ser Asp Met  
 195 200 205

Glu Arg Lys Ile Ala Glu Leu Glu Thr Glu Lys Arg Asp Leu Glu Arg  
 210 215 220

Gln Val Asn Glu Gln Lys Ala Lys Cys Glu Ala Thr Glu Lys Arg Glu  
 225 230 235 240

Ser Glu Arg Arg Gln Val Glu Glu Lys Lys His Asn Glu Glu Ile Gln  
 245 250 255

Phe Leu Lys Arg Thr Asn Gln Gln Leu Lys Ala Gln Leu Glu Gly Ile  
 260 265 270

Ile Ala Pro Lys Lys  
 275

<210> 1468

<211> 263

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (6)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1468

Arg Pro Ala Ala Ala Xaa Ser Gly Gly Thr Gly Ser Gly Arg Gly Ser  
 1 5 10 15

Arg Pro Glu Pro Ser Arg Ala Glu Pro Ser Arg Ser Gly Arg Arg Arg  
 20 25 30

Pro Ala Arg Arg Ala Ala Thr Met Ser Val Phe Gly Lys Leu Phe Gly  
 35 40 45

Ala Gly Gly Gly Lys Ala Gly Lys Gly Gly Pro Thr Pro Gln Glu Ala  
 50 55 60

Ile Gln Arg Leu Arg Asp Thr Glu Glu Met Leu Ser Lys Lys Gln Glu  
 65 70 75 80

Phe Leu Glu Lys Lys Ile Glu Gln Glu Leu Thr Ala Ala Lys Lys His  
 85 90 95

Gly Thr Lys Asn Lys Arg Ala Ala Leu Gln Ala Leu Lys Arg Lys Lys

100	105	110
Arg Tyr Glu Lys Gln Leu Ala Gln Ile Asp Gly Thr Leu Ser Thr Ile		
115	120	125
Glu Phe Gln Arg Glu Ala Leu Glu Asn Ala Asn Thr Asn Thr Glu Val		
130	135	140
Leu Lys Asn Met Gly Tyr Ala Ala Lys Ala Met Lys Ala Ala His Asp		
145	150	155
Asn Met Asp Ile Asp Lys Val Asp Glu Leu Met Gln Asp Ile Ala Asp		
165	170	175
Gln Gln Glu Leu Ala Glu Glu Ile Ser Thr Ala Ile Ser Lys Pro Val		
180	185	190
Gly Phe Gly Glu Glu Phe Asp Glu Asp Glu Leu Met Ala Glu Leu Glu		
195	200	205
Glu Leu Glu Gln Glu Glu Leu Asp Lys Asn Leu Leu Glu Ile Ser Gly		
210	215	220
Pro Glu Thr Val Pro Leu Pro Asn Val Pro Ser Ile Ala Leu Pro Ser		
225	230	235
Lys Pro Ala Lys Lys Lys Glu Glu Glu Asp Asp Asp Met Lys Glu Leu		
245	250	255
Glu Asn Trp Ala Gly Ser Met		
260		

&lt;210&gt; 1469

&lt;211&gt; 192

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (101)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (118)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1469

Phe Arg Pro Trp Thr Leu Asp Leu Val Asp Glu Gly His Trp Pro Gly

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1           5           10           15
Pro Arg Val Phe Gly Gly Arg Arg Gly Leu Ala Trp Val Pro Thr Gly
      20           25           30
Cys Leu Thr Ser Ser Cys Ser Leu His Leu Gly Cys Val Gly Gln Gly
      35           40           45
Leu Cys Cys His Ser Arg Asn Arg Phe Ser Ser Val Gly Leu Pro Phe
      50           55           60
Leu His Pro Gly Leu Lys Trp Met Pro Asp Ala Asn Pro Ser Ser Gly
      65           70           75           80
His Val Gln Pro Ala Gly Gln Pro Arg Gly Ser Leu Ser Ser Arg Ala
      85           90           95
Lys Asp Ser Arg Xaa Pro Phe Ser Leu Leu Ala Phe Leu Leu Cys Pro
      100           105           110
Ala Val Ala Ala Gly Xaa Ser Ser Cys Ser Arg Arg Glu Thr Val Leu
      115           120           125
Pro Leu Ser Pro Ser Leu Pro His Pro Ser Ser Cys Pro Gly Asn Leu
      130           135           140
Glu Pro Leu Gly Ala Glu Leu Asp Gly Gly Pro Ala Ala Ser Met Cys
      145           150           155           160
Thr Lys Arg Ser Pro Phe Gln Gly Lys Arg Thr Gly Trp Arg Met Glu
      165           170           175
Gly Lys Pro Pro Arg Leu Arg Glu Leu Gln Glu Gly Thr Leu Pro Gly
      180           185           190

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&lt;210&gt; 1470

&lt;211&gt; 260

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1470

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Arg Lys Cys Leu Tyr Leu Val Ala Gly Lys Trp Glu Glu Arg Lys Val
1           5           10           15
Val Met Ala Ala Ile Ala Ala Ser Glu Val Leu Val Asp Ser Ala Glu
      20           25           30

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Glu Gly Ser Leu Ala Ala Ala Ala Glu Leu Ala Ala Gln Lys Arg Glu  
35 40 45

Gln Arg Leu Arg Lys Phe Arg Glu Leu His Leu Met Arg Asn Glu Ala  
50 55 60

Arg Lys Leu Asn His Gln Glu Val Val Glu Glu Asp Lys Arg Leu Lys  
65 70 75 80

Leu Pro Ala Asn Trp Glu Ala Lys Lys Ala Arg Leu Glu Trp Glu Leu  
85 90 95

Lys Glu Glu Glu Lys Lys Lys Glu Cys Ala Ala Arg Gly Glu Asp Tyr  
100 105 110

Glu Lys Val Lys Leu Leu Glu Ile Ser Ala Glu Asp Ala Glu Arg Trp  
115 120 125

Glu Arg Lys Lys Lys Arg Lys Asn Pro Asp Leu Gly Phe Ser Asp Tyr  
130 135 140

Ala Ala Ala Gln Leu Arg Gln Tyr His Arg Leu Thr Lys Gln Ile Lys  
145 150 155 160

Pro Asp Met Glu Thr Tyr Glu Arg Leu Arg Glu Lys His Gly Glu Glu  
165 170 175

Phe Phe Pro Thr Ser Asn Ser Leu Leu His Gly Thr His Val Pro Ser  
180 185 190

Thr Glu Glu Ile Asp Arg Met Val Ile Asp Leu Glu Lys Gln Ile Glu  
195 200 205

Lys Arg Asp Lys Tyr Ser Arg Arg Arg Pro Tyr Asn Asp Asp Ala Asp  
210 215 220

Ile Asp Tyr Ile Asn Glu Arg Asn Ala Lys Phe Asn Lys Lys Ala Glu  
225 230 235 240

Arg Phe Tyr Gly Lys Tyr Thr Ala Glu Ile Lys Gln Asn Leu Glu Arg  
245 250 255

Gly Thr Ala Val  
260

&lt;210&gt; 1471

&lt;211&gt; 121

&lt;212&gt; PRT

<213> Homo sapiens

<400> 1471

Leu Val Lys Gly Met Thr Val Leu Glu Ala Val Leu Glu Ile Gln Ala  
1 5 10 15  
Ile Thr Gly Ser Arg Leu Leu Ser Met Val Pro Gly Pro Ala Arg Pro  
20 25 30  
Pro Gly Ser Cys Trp Asp Pro Thr Gln Cys Thr Arg Thr Trp Leu Leu  
35 40 45  
Ser His Thr Pro Arg Arg Arg Trp Ile Ser Gly Leu Pro Arg Ala Ser  
50 55 60  
Cys Arg Leu Gly Glu Glu Pro Pro Pro Leu Pro Tyr Cys Asp Gln Ala  
65 70 75 80  
Tyr Gly Glu Glu Leu Ser Ile Arg His Arg Glu Thr Trp Ala Trp Leu  
85 90 95  
Ser Arg Thr Asp Thr Ala Trp Pro Gly Ala Pro Gly Val Lys Gln Ala  
100 105 110  
Arg Ile Leu Gly Glu Leu Leu Leu Val  
115 120

<210> 1472

<211> 298

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (26)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (79)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (89)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1472

Pro Cys Ala Trp Arg Ala Ala Arg Gly Gly Pro Cys Ala Ala Pro Leu

1	5	10	15
Gly Leu Arg Glu Arg Gly Arg Val Ser Xaa Arg Leu Leu Gly Pro Ala	20	25	30
Ala Ala Arg Ala Leu Leu Leu Gly Leu Pro Gly Arg Thr Leu Glu Ala	35	40	45
Ala Ser Gly Arg Ser Trp Leu Ala Ala Ala Arg Asp Arg Pro Ala Glu	50	55	60
Pro Leu Phe Gly Arg Gly Glu Gly Gly Ser Gln Ala Ser Gly Xaa Ala	65	70	75
Gly Ala Ala Ala Glu Ala Pro Gly Xaa Gln Trp Gly Pro Ala Ser Thr	85	90	95
Pro Ser Leu Tyr Glu Asn Pro Trp Thr Ile Pro Asn Met Leu Ser Met	100	105	110
Thr Arg Ile Gly Leu Ala Pro Val Leu Gly Tyr Leu Ile Ile Glu Glu	115	120	125
Asp Phe Asn Ile Ala Leu Gly Val Phe Ala Leu Ala Gly Leu Thr Asp	130	135	140
Leu Leu Asp Gly Phe Ile Ala Arg Asn Trp Ala Asn Gln Arg Ser Ala	145	150	155
Leu Gly Ser Ala Leu Asp Pro Leu Ala Asp Lys Ile Leu Ile Ser Ile	165	170	175
Leu Tyr Val Ser Leu Thr Tyr Ala Asp Leu Ile Pro Val Pro Leu Thr	180	185	190
Tyr Met Ile Ile Ser Arg Asp Val Met Leu Ile Ala Ala Val Phe Tyr	195	200	205
Val Arg Tyr Arg Thr Leu Pro Thr Pro Arg Thr Leu Ala Lys Tyr Phe	210	215	220
Asn Pro Cys Tyr Ala Thr Ala Arg Leu Lys Pro Thr Phe Ile Ser Lys	225	230	235
Val Asn Thr Ala Val Gln Leu Ile Leu Val Ala Ala Ser Leu Ala Ala	245	250	255
Pro Val Phe Asn Tyr Ala Asp Ser Ile Tyr Leu Gln Ile Leu Trp Cys	260	265	270
Phe Thr Ala Phe Thr Thr Ala Ala Ser Ala Tyr Ser Tyr Tyr His Tyr			



275

280

285

Gly Arg Lys Thr Val Gln Val Ile Lys Asp  
 290 295

&lt;210&gt; 1473

&lt;211&gt; 526

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1473

Val Ala Leu Gly Ala Ala Met Ser Ala Gly Glu Val Glu Arg Leu Val  
 1 5 10 15

Ser Glu Leu Ser Gly Gly Thr Gly Gly Asp Glu Glu Glu Glu Trp Leu  
 20 25 30

Tyr Gly Asp Glu Asn Glu Val Glu Arg Pro Glu Glu Glu Asn Ala Ser  
 35 40 45

Ala Asn Pro Pro Ser Gly Ile Glu Asp Glu Thr Ala Glu Asn Gly Val  
 50 55 60

Pro Lys Pro Lys Val Thr Glu Thr Glu Asp Asp Ser Asp Ser Asp Ser  
 65 70 75 80

Asp Asp Asp Glu Asp Asp Val His Val Thr Ile Gly Asp Ile Lys Thr  
 85 90 95

Gly Ala Pro Gln Tyr Gly Ser Tyr Gly Thr Ala Pro Val Asn Leu Asn  
 100 105 110

Ile Lys Thr Gly Gly Arg Val Tyr Gly Thr Thr Gly Thr Lys Val Lys  
 115 120 125

Gly Val Asp Leu Asp Ala Pro Gly Ser Ile Asn Gly Val Pro Leu Leu  
 130 135 140

Glu Val Asp Leu Asp Ser Phe Glu Asp Lys Pro Trp Arg Lys Pro Gly  
 145 150 155 160

Ala Asp Leu Ser Asp Tyr Phe Asn Tyr Gly Phe Asn Glu Asp Thr Trp  
 165 170 175

Lys Ala Tyr Cys Glu Lys Gln Lys Arg Ile Arg Met Gly Leu Glu Val  
 180 185 190

Ile Pro Val Thr Ser Thr Thr Asn Lys Ile Thr Val Gln Gln Gly Arg  
 195 200 205

Thr Gly Asn Ser Glu Lys Glu Thr Ala Leu Pro Ser Thr Lys Ala Glu  
210 215 220

Phe Thr Ser Pro Pro Ser Leu Phe Lys Thr Gly Leu Pro Pro Ser Arg  
225 230 235 240

Arg Leu Pro Gly Ala Ile Asp Val Ile Gly Gln Thr Ile Thr Ile Ser  
245 250 255

Arg Val Glu Gly Arg Arg Arg Ala Asn Glu Asn Ser Asn Ile Gln Val  
260 265 270

Leu Ser Glu Arg Ser Ala Thr Glu Val Asp Asn Asn Phe Ser Lys Pro  
275 280 285

Pro Pro Phe Phe Pro Pro Gly Ala Pro Pro Thr His Leu Pro Pro Pro  
290 295 300

Pro Phe Leu Pro Pro Pro Pro Thr Val Ser Thr Ala Pro Pro Leu Ile  
305 310 315 320

Pro Pro Pro Gly Phe Pro Pro Pro Pro Gly Ala Pro Pro Pro Ser Leu  
325 330 335

Ile Pro Thr Ile Glu Ser Gly His Ser Ser Gly Tyr Asp Ser Arg Ser  
340 345 350

Ala Arg Ala Phe Pro Tyr Gly Asn Val Ala Phe Pro His Leu Pro Gly  
355 360 365

Ser Ala Pro Ser Trp Pro Ser Leu Val Asp Thr Ser Lys Gln Trp Asp  
370 375 380

Tyr Tyr Ala Arg Arg Glu Lys Asp Arg Asp Arg Glu Arg Asp Arg Asp  
385 390 395 400

Arg Glu Arg Asp Arg Asp Arg Asp Arg Glu Arg Glu Arg Thr Arg Glu  
405 410 415

Arg Glu Arg Glu Arg Asp His Ser Pro Thr Pro Ser Val Phe Asn Ser  
420 425 430

Asp Glu Glu Arg Tyr Arg Tyr Arg Glu Tyr Ala Glu Arg Gly Tyr Glu  
435 440 445

Arg His Arg Ala Ser Arg Glu Lys Glu Glu Arg His Arg Glu Arg Arg  
450 455 460

His Arg Glu Lys Glu Glu Thr Arg His Lys Ser Ser Arg Ser Asn Ser  
465 470 475 480

Arg Arg Arg His Glu Ser Glu Glu Gly Asp Ser His Arg Arg His Lys  
485 490 495

His Lys Lys Ser Lys Arg Ser Lys Glu Gly Lys Glu Ala Gly Ser Glu  
500 505 510

Pro Ala Pro Glu Gln Glu Ser Thr Glu Ala Thr Pro Ala Glu  
515 520 525

<210> 1474

<211> 70

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (7)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1474

Ile Met Val Arg Pro Gly Xaa Thr Leu Arg Leu Asp Lys Lys Met Leu  
1 5 10 15

Leu Lys Arg Ser Ser Phe Lys Arg Ser Cys Ser Cys Val Lys Lys Leu  
20 25 30

Gln Val Trp Phe Val Leu Val Cys Asp His Glu Cys Thr Met Lys Lys  
35 40 45

Thr Leu Asp Ala Ala Phe Phe Ser Ser Glu Asp Ser Leu Gly Ile Pro  
50 55 60

Glu Asp Ser Ser Leu Arg  
65 70

<210> 1475

<211> 345

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (44)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE  
 <222> (54)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (129)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (159)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (166)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 1475  
 Lys Lys Val Val Ser Tyr Phe Phe Arg Trp Gln Ser Leu Leu Ile Met  
   1                  5                  10                  15  
 Ile Met Met Phe Lys Ile Pro Pro Ser Asp Gly Leu Leu Ile Leu Pro  
           20                  25                  30  
 Cys Tyr Gly Ser Met Thr Thr Asp Gln Gln Arg Xaa Ile Phe Leu Pro  
       35                  40                  45  
 Pro Pro Pro Gly Ile Xaa Lys Cys Val Ile Ser Thr Asn Ile Ser Ala  
       50                  55                  60  
 Thr Ser Leu Thr Ile Asp Gly Ile Arg Tyr Val Val Asp Gly Gly Phe  
   65                  70                  75                  80  
 Val Lys Gln Leu Asn His Asn Pro Arg Leu Gly Leu Asp Ile Leu Glu  
           85                  90                  95  
 Val Val Pro Ile Ser Lys Ser Glu Ala Leu Gln Arg Ser Gly Arg Ala  
       100                  105                  110  
 Gly Arg Thr Ser Ser Gly Lys Cys Phe Arg Ile Tyr Ser Lys Asp Phe  
       115                  120                  125  
 Xaa Asn Gln Cys Met Pro Asp His Val Ile Pro Glu Ile Lys Arg Thr  
       130                  135                  140  
 Ser Leu Thr Ser Val Val Leu Thr Leu Lys Cys Leu Ala Ile Xaa Asp  
   145                  150                  155                  160  
 Val Ile Arg Phe Pro Xaa Leu Asp Pro Pro Asn Glu Arg Leu Ile Leu

165	170	175
Glu Ala Leu Lys Gln Leu Tyr Gln Cys Asp Ala Ile Asp Arg Ser Gly		
180	185	190
His Val Thr Arg Leu Gly Leu Ser Met Val Glu Phe Pro Leu Pro Pro		
195	200	205
His Leu Thr Cys Ala Val Ile Lys Ala Ala Ser Leu Asp Cys Glu Asp		
210	215	220
Leu Leu Leu Pro Ile Ala Ala Met Leu Ser Val Glu Asn Val Phe Ile		
225	230	235
Arg Pro Val Asp Pro Glu Tyr Gln Lys Glu Ala Glu Gln Arg His Arg		
245	250	255
Glu Leu Ala Ala Lys Ala Gly Gly Phe Asn Asp Phe Ala Thr Leu Ala		
260	265	270
Val Ile Phe Glu Gln Cys Lys Ser Ser Gly Ala Pro Ala Ser Trp Cys		
275	280	285
Gln Lys His Trp Ile His Trp Arg Cys Leu Phe Ser Ala Phe Arg Val		
290	295	300
Glu Ala Gln Leu Arg Glu Leu Ile Arg Lys Leu Lys Gln Gln Ser Asp		
305	310	315
Ser Gln Lys Arg Pro Leu Lys Ala Leu Asn Met Lys Tyr Tyr Glu Asp		
325	330	335
Val Phe Val Arg Ala Ile Ser Lys Met		
340	345	

&lt;210&gt; 1476

&lt;211&gt; 195

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1476

Tyr Leu Leu Phe Val Lys Asn Met Ser Ser Leu Glu Ile Ser Ser Ser		
1	5	10
		15
Cys Phe Ser Leu Glu Thr Lys Leu Pro Leu Ser Pro Pro Leu Val Glu		
20	25	30
Asp Ser Ala Phe Glu Pro Ser Arg Lys Asp Met Asp Glu Val Glu Glu		
35	40	45

Lys Ser Lys Asp Val Ile Asn Phe Thr Ala Glu Lys Leu Ser Val Asp  
50 55 60

Glu Val Ser Gln Leu Val Ile Ser Pro Leu Cys Gly Ala Ile Ser Leu  
65 70 75 80

Phe Val Gly Thr Thr Arg Asn Asn Phe Glu Gly Lys Lys Val Ile Ser  
85 90 95

Leu Glu Tyr Glu Ala Tyr Leu Pro Met Ala Glu Asn Glu Val Arg Lys  
100 105 110

Ile Cys Ser Asp Ile Arg Gln Lys Trp Pro Val Lys His Ile Ala Val  
115 120 125

Phe His Arg Leu Gly Leu Val Pro Val Ser Glu Ala Ser Ile Ile Ile  
130 135 140

Ala Val Ser Ser Ala His Arg Ala Ala Ser Leu Glu Ala Val Ser Tyr  
145 150 155 160

Ala Ile Asp Thr Leu Lys Ala Lys Val Pro Ile Trp Lys Lys Glu Ile  
165 170 175

Tyr Glu Glu Ser Ser Thr Trp Lys Gly Asn Lys Glu Cys Phe Trp Ala  
180 185 190

Ser Asn Ser  
195

<210> 1477

<211> 387

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (35)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (370)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (374)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (378)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (379)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1477

Asp Ser Glu Asp Asn Pro Gln Thr Leu Leu Phe Ser Ala Thr Cys Pro  
1 5 10 15

Gln Trp Val Tyr Lys Val Ala Lys Lys Tyr Met Lys Ser Arg Tyr Glu  
20 25 30

Gln Val Xaa Leu Val Gly Lys Met Thr Gln Lys Ala Ala Thr Thr Val  
35 40 45

Glu His Leu Ala Ile Gln Cys His Trp Ser Gln Arg Pro Ala Val Ile  
50 55 60

Gly Asp Val Leu Gln Val Tyr Ser Gly Ser Glu Gly Arg Ala Ile Ile  
65 70 75 80

Phe Cys Glu Thr Lys Lys Asn Val Thr Glu Met Ala Met Asn Pro His  
85 90 95

Ile Lys Gln Asn Ala Gln Cys Leu His Gly Asp Ile Ala Gln Ser Gln  
100 105 110

Arg Glu Ile Thr Leu Lys Gly Phe Arg Glu Gly Ser Phe Lys Val Leu  
115 120 125

Val Ala Thr Asn Val Ala Ala Arg Gly Leu Asp Ile Pro Glu Val Asp  
130 135 140

Leu Val Ile Gln Ser Ser Pro Pro Gln Asp Val Glu Ser Tyr Ile His  
145 150 155 160

Arg Ser Gly Arg Thr Gly Arg Ala Gly Arg Thr Gly Ile Cys Ile Cys  
165 170 175

Phe Tyr Gln Pro Arg Glu Arg Gly Gln Leu Arg Tyr Val Glu Gln Lys  
180 185 190

Ala Gly Ile Thr Phe Lys Arg Val Gly Val Pro Ser Thr Met Asp Leu  
195 200 205

Val Lys Ser Lys Ser Met Asp Ala Ile Arg Ser Leu Ala Ser Val Ser  
 210 215 220  
 Tyr Ala Ala Val Asp Phe Phe Arg Pro Ser Ala Gln Arg Leu Ile Glu  
 225 230 235 240  
 Glu Lys Gly Ala Val Asp Ala Leu Ala Ala Ala Leu Ala His Ile Ser  
 245 250 255  
 Gly Ala Ser Ser Phe Glu Pro Arg Ser Leu Ile Thr Ser Asp Lys Gly  
 260 265 270  
 Phe Val Thr Met Thr Leu Glu Ser Leu Glu Glu Ile Gln Asp Val Ser  
 275 280 285  
 Cys Ala Trp Lys Glu Leu Asn Arg Lys Leu Ser Ser Asn Ala Val Ser  
 290 295 300  
 Gln Ile Thr Arg Met Cys Leu Leu Lys Gly Asn Met Gly Val Cys Phe  
 305 310 315 320  
 Asp Val Pro Thr Thr Glu Ser Glu Arg Leu Gln Ala Glu Trp His Asp  
 325 330 335  
 Ser Asp Trp Ile Leu Ser Val Pro Ala Lys Leu Pro Glu Ile Glu Glu  
 340 345 350  
 Tyr Tyr Asp Gly Asn Thr Ser Ser Asn Ser Arg Gln Arg Ser Gly Trp  
 355 360 365  
 Ser Xaa Gly Arg Ser Xaa Arg Ser Ala Xaa Xaa Gly Gly Arg Ser Gly  
 370 375 380  
 Gly Gly Gln  
 385

&lt;210&gt; 1478

&lt;211&gt; 55

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1478

Thr Gly Ala Cys His His Ala Gln Leu Asn Phe Val Phe Leu Val Glu  
 1 5 10 15

Thr Gly Phe His His Val Gly Gln Asp Gly Leu Asn Leu Leu Thr Leu  
 20 25 30



His Thr Ala Asn Glu Arg Arg Leu Lys Glu Leu Ile Gly Ala Thr Ala  
165 170 175

Gly Lys Leu His Thr Gly Arg Ser Arg Asn Asp Gln Val Val Thr Asp  
 180 185 190

Leu Arg Leu Trp Met Arg Gln Thr Cys Ser Thr Leu Ser Gly Leu Leu  
 195 200 205

Trp Glu Leu Ile Arg Thr Met Val Asp Arg Ala Glu Ala Glu Arg Asp  
 210 215 220

Val Leu Phe Pro Gly Tyr Thr His Leu Gln Arg Ala Gln Pro Ile Arg  
 225 230 235 240

Trp Ser His Trp Ile Leu Ser His Ala Val Ala Leu Thr Arg Asp Ser  
 245 250 255

Glu Arg Leu Leu Glu Val Arg Lys Arg Ile Asn Val Leu Pro Leu Gly  
 260 265 270

Ser Gly Ala Ile Ala Gly Asn Pro Leu Gly Val Asp Arg Glu Leu Leu  
 275 280 285

Arg Ala Glu Leu Asn Phe Gly Ala Ile Thr Leu Asn Ser Met Asp Ala  
 290 295 300

Thr Ser Glu Arg Asp Phe Val Ala Glu Phe Leu Phe Trp Ala Ser Leu  
 305 310 315 320

Cys Met Thr His Leu Ser Arg Met Ala Glu Asp Leu Ile Leu Tyr Cys  
 325 330 335

Thr Lys Glu Phe Ser Phe Val Gln Leu Ser Asp Ala Tyr Ser Thr Gly  
 340 345 350

Ser Ser Leu Met Pro Gln Lys Lys Asn Pro Asp Ser Leu Glu Leu Ile  
 355 360 365

Arg Ser Lys Ala Gly Arg Val Phe Gly Arg Cys Ala Gly Leu Leu Met  
 370 375 380

Thr Leu Lys Gly Leu Pro Ser Thr Tyr Asn Lys Asp Leu Gln Glu Asp  
 385 390 395 400

Lys Glu Ala Val Phe Glu Val Ser Asp Thr Met Ser Ala Val Leu Gln  
 405 410 415

Val Ala Thr Gly Val Ile Ser Thr Leu Gln Ile His Gln Glu Asn Met  
 420 425 430

Gly Gln Ala Leu Ser Pro Asp Met Leu Ala Thr Asp Leu Ala Tyr Tyr  
 435 440 445

Leu Val Arg Lys Gly Met Pro Phe Arg Gln Ala His Glu Ala Ser Gly  
 450 455 460

Lys Ala Val Phe Met Ala Glu Thr Lys Gly Val Ala Leu Asn Gln Leu  
 465 470 475 480

Ser Leu Gln Glu Leu Gln Thr Ile Ser Pro Leu Phe Ser Gly Asp Val  
 485 490 495

Ile Cys Val Trp Asp Tyr Gly His Ser Val Glu Gln Tyr Gly Ala Leu  
 500 505 510

Gly Ala Leu Arg Ala Pro Ala Ser Thr Gly Arg Ser Ala Arg Cys Gly  
 515 520 525

Arg Tyr Cys Arg His Ser Arg Pro Arg Ser Ser His Thr Cys Pro Leu  
 530 535 540

Ile Lys Trp Ala Arg Glu Glu Lys Lys Lys Xaa Lys Lys Lys Phe  
 545 550 555

<210> 1480

<211> 200

<212> PRT

<213> Homo sapiens

<400> 1480

Ser Leu Gly Glu Leu Pro Thr Asp Pro Ser Ser Asp Glu Pro Val Phe  
 1 5 10 15

His Ile Ser His Ile Asp Arg Val Tyr Thr Leu Arg Thr Asp Asn Ile  
 20 25 30

Asn Glu Arg Thr Thr Trp Val Gln Lys Ile Lys Ala Ala Ser Glu Gln  
 35 40 45

Tyr Ile Asp Thr Glu Lys Lys Lys Arg Glu Lys Ala Tyr Gln Ala Arg  
 50 55 60

Ser Gln Lys Thr Ser Gly Ile Gly Arg Leu Met Val His Val Ile Glu  
 65 70 75 80

Ala Thr Glu Leu Lys Ala Cys Lys Pro Asn Gly Lys Ser Asn Pro Tyr  
 85 90 95

Cys Glu Ile Ser Met Gly Ser Gln Ser Tyr Thr Thr Arg Thr Ile Gln  
 100 105 110

Asp Thr Leu Asn Pro Lys Trp Asn Phe Asn Cys Gln Phe Phe Ile Lys  
 115 120 125

Asp Leu Tyr Gln Asp Val Leu Cys Leu Thr Leu Phe Asp Arg Asp Gln  
 130 135 140

Phe Ser Pro Asp Asp Phe Leu Gly Arg Thr Glu Ile Pro Val Ala Lys  
 145 150 155 160

Ile Arg Thr Glu Gln Glu Ser Lys Gly Pro Met Thr Arg Arg Leu Leu  
 165 170 175

Leu His Glu Val Pro Thr Gly Glu Val Trp Val Arg Phe Asp Leu Gln  
 180 185 190

Leu Phe Glu Gln Lys Thr Leu Leu  
 195 200

<210> 1481

<211> 109

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (36)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1481

Gln Leu Leu Leu Leu Pro Pro Lys Ala Pro Arg Asn Pro Phe Leu Pro  
 1 5 10 15

Cys Pro Gly Ser Arg Thr Pro Gly Tyr Ile Trp Lys Val Glu Met Trp  
 20 25 30

Gly Ser Cys Xaa Leu Glu Tyr Tyr Val Ser Pro Pro Ser Ala Val Phe  
 35 40 45

Ser Glu His Val Cys Cys Pro Trp Trp Glu Arg Gly His Cys Ala Val  
 50 55 60

Val His Arg Cys Leu Ser Phe Thr Val Gly Leu Ser Val Cys Leu Ser  
 65 70 75 80

Phe Leu Ser Ala Ala Gln Met Glu Asn Asn Tyr Leu Leu His Trp Arg  
 85 90 95

Glu Arg Lys Ser Leu Arg Ile Pro Lys Gly Thr Leu Ala  
 100 105

<210> 1482  
<211> 205  
<212> PRT  
<213> Homo sapiens

<400> 1482

Asp	Pro	Arg	Val	Arg	Ala	Ala	Arg	Thr	Ala	Phe	Gly	Ala	Val	Cys	Arg
1				5					10					15	
Arg	Leu	Trp	Gln	Gly	Leu	Gly	Asn	Phe	Ser	Val	Asn	Thr	Ser	Lys	Gly
			20					25					30		
Asn	Thr	Ala	Lys	Asn	Gly	Gly	Leu	Leu	Leu	Ser	Thr	Asn	Met	Lys	Trp
		35					40					45			
Val	Gln	Phe	Ser	Asn	Leu	His	Val	Asp	Val	Pro	Lys	Asp	Leu	Thr	Lys
	50					55					60				
Pro	Val	Val	Thr	Ile	Ser	Asp	Glu	Pro	Asp	Ile	Leu	Tyr	Lys	Arg	Leu
65					70					75					80
Ser	Val	Leu	Val	Lys	Gly	His	Asp	Lys	Ala	Val	Leu	Asp	Ser	Tyr	Glu
				85					90					95	
Tyr	Phe	Ala	Val	Leu	Ala	Ala	Lys	Glu	Leu	Gly	Ile	Ser	Ile	Lys	Val
		100						105					110		
His	Glu	Pro	Pro	Arg	Lys	Ile	Glu	Arg	Phe	Thr	Leu	Leu	Gln	Ser	Val
	115						120					125			
His	Ile	Tyr	Lys	Lys	His	Arg	Val	Gln	Tyr	Glu	Met	Arg	Thr	Leu	Tyr
130						135					140				
Arg	Cys	Leu	Glu	Leu	Glu	His	Leu	Thr	Gly	Ser	Thr	Ala	Asp	Val	Tyr
145					150					155					160
Leu	Glu	Tyr	Ile	Gln	Arg	Asn	Leu	Pro	Glu	Gly	Val	Ala	Met	Glu	Val
				165					170					175	
Thr	Lys	Thr	Gln	Leu	Glu	Gln	Leu	Pro	Glu	His	Ile	Lys	Glu	Pro	Ile
			180					185					190		
Trp	Glu	Thr	Leu	Ser	Glu	Glu	Lys	Glu	Glu	Ser	Lys	Ser			
	195						200					205			

<210> 1483

&lt;211&gt; 370

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1483

Gly Gln Ile Lys Asp Glu Thr Leu Gln Ala Ala Val Arg Glu Ile Leu  
 1 5 10 15

Ala Leu Ile Gly Tyr Val Asp Pro Val Lys Gly Arg Gly Ile Arg Ile  
 20 25 30

Leu Ser Ile Asp Gly Gly Gly Thr Arg Gly Val Val Ala Leu Gln Thr  
 35 40 45

Leu Arg Lys Leu Val Glu Leu Thr Gln Lys Pro Val His Gln Leu Phe  
 50 55 60

Asp Tyr Ile Cys Gly Val Ser Thr Gly Ala Ile Leu Ala Phe Met Leu  
 65 70 75 80

Gly Leu Phe His Met Pro Leu Asp Glu Cys Glu Glu Leu Tyr Arg Lys  
 85 90 95

Leu Gly Ser Asp Val Phe Ser Gln Asn Val Ile Val Gly Thr Val Lys  
 100 105 110

Met Ser Trp Ser His Ala Phe Tyr Asp Ser Gln Thr Trp Glu Asn Ile  
 115 120 125

Leu Lys Asp Arg Met Gly Ser Ala Leu Met Ile Glu Thr Ala Arg Asn  
 130 135 140

Pro Thr Cys Pro Lys Val Ala Ala Val Ser Thr Ile Val Asn Arg Gly  
 145 150 155 160

Ile Thr Pro Lys Ala Phe Val Phe Arg Asn Tyr Gly His Phe Pro Gly  
 165 170 175

Ile Asn Ser His Tyr Leu Gly Gly Cys Gln Tyr Lys Met Trp Gln Ala  
 180 185 190

Ile Arg Ala Ser Ser Ala Ala Pro Gly Tyr Phe Ala Glu Tyr Ala Leu  
 195 200 205

Gly Asn Asp Leu His Gln Asp Gly Gly Leu Leu Leu Asn Asn Pro Ser  
 210 215 220

Ala Leu Ala Met His Glu Cys Lys Cys Leu Trp Pro Asp Val Pro Leu  
 225 230 235 240

Glu Cys Ile Val Ser Leu Gly Thr Gly Arg Tyr Glu Ser Asp Val Arg

245                      250                      255  
 Asn Thr Val Thr Tyr Thr Ser Leu Lys Thr Lys Leu Ser Asn Val Ile  
                     260                      265                      270  
 Asn Ser Ala Thr Asp Thr Glu Glu Val His Ile Met Leu Asp Gly Leu  
                     275                      280                      285  
 Leu Pro Pro Asp Thr Tyr Phe Arg Phe Asn Pro Val Met Cys Glu Asn  
                     290                      295                      300  
 Ile Pro Leu Asp Glu Ser Arg Asn Glu Lys Leu Asp Gln Leu Gln Leu  
 305                      310                      315                      320  
 Glu Gly Leu Lys Tyr Ile Glu Arg Asn Glu Gln Lys Met Lys Lys Val  
                     325                      330                      335  
 Ala Lys Ile Leu Ser Gln Glu Lys Thr Thr Leu Gln Lys Ile Asn Asp  
                     340                      345                      350  
 Trp Ile Lys Leu Lys Thr Asp Met Tyr Glu Gly Leu Pro Phe Phe Ser  
                     355                      360                      365  
 Lys Leu  
                     370

<210> 1484  
 <211> 149  
 <212> PRT  
 <213> Homo sapiens

<400> 1484  
 Asp Ser Thr Gly Pro Glu Phe Pro Gly Arg Pro Thr Arg Pro Asn Ser  
   1                    5                    10                    15  
 Val Leu Thr Ile Asn Ala Thr Met Pro Glu Pro Thr Lys Ser Ala Pro  
                     20                    25                    30  
 Ala Pro Lys Lys Gly Ser Lys Lys Ala Val Thr Lys Ala Gln Lys Lys  
                     35                    40                    45  
 Asp Gly Lys Lys Arg Lys Arg Ser Arg Lys Glu Ser Tyr Ser Val Tyr  
                     50                    55                    60  
 Val Tyr Lys Val Leu Lys Gln Val His Pro Asp Thr Gly Ile Ser Ser  
                     65                    70                    75                    80  
 Lys Ala Met Gly Ile Met Asn Ser Phe Val Asn Asp Ile Phe Glu Arg  
                     85                    90                    95

Ile Ala Gly Glu Ala Ser Arg Leu Ala His Tyr Asn Lys Arg Ser Thr  
100 105 110

Ile Thr Ser Arg Glu Ile Gln Thr Ala Val Arg Leu Leu Leu Pro Gly  
115 120 125

Glu Leu Ala Lys His Ala Val Ser Glu Gly Thr Lys Ala Val Thr Lys  
130 135 140

Tyr Thr Ser Ser Lys  
145

<210> 1485

<211> 142

<212> PRT

<213> Homo sapiens

<400> 1485

Asp Pro Arg Val Arg Thr Phe Pro Pro Thr Leu Leu Leu Leu His  
1 5 10 15

Ser Arg Leu Ser Leu Cys Leu Ser His Phe Leu Pro Ser Pro His Pro  
20 25 30

Pro Gln Cys Thr Glu Glu Gly Asn Arg Val Gln Thr His Ala Ala Pro  
35 40 45

Val Leu Arg Arg Glu Gly Lys Pro Arg Arg Glu Ala Ala Met Asn Val  
50 55 60

Asp His Glu Val Asn Leu Leu Val Glu Glu Ile His Arg Leu Gly Ser  
65 70 75 80

Lys Asn Ala Asp Gly Lys Leu Ser Val Lys Phe Gly Val Leu Phe Arg  
85 90 95

Asp Asp Lys Cys Ala Asn Leu Phe Glu Ala Leu Val Gly Thr Leu Lys  
100 105 110

Ala Ala Lys Arg Arg Lys Ile Val Thr Tyr Pro Gly Glu Leu Leu Leu  
115 120 125

Gln Gly Val His Asp Asp Val Asp Ile Ile Leu Leu Gln Asp  
130 135 140

<210> 1486



<211> 298  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (52)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (183)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (195)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (223)  
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1486  
Arg Gly Lys Cys Pro Ser Thr Ser Ser Leu Met Lys Glu Thr Ala Ala  
1 5 10 15  
Pro Ser Gln Ile Met Lys Asn Phe Gln Ala Pro Pro Gln Ile Ser Leu  
20 25 30  
Thr Ile Thr Leu Leu Leu Gly Glu Thr Thr Met Met Gln Pro Gln Pro  
35 40 45  
Thr Gln Gln Xaa Thr Pro Gly Pro Ser Ser Gly Gly His Ala Ser Gln  
50 55 60  
Ser Gly Asp Asn Ser Ser Glu Gln Gly Asp Gly Leu Asp Asn Ser Val  
65 70 75 80  
Ala Ser Pro Gly Thr Val Thr Asp Asp Asp Pro Asp Lys Asp Lys Lys  
85 90 95  
Arg Gln Lys Lys Arg Gly Ile Phe Pro Lys Val Ala Thr Asn Ile Met  
100 105 110  
Arg Ala Trp Leu Phe Gln His Leu Thr His Pro Tyr Pro Ser Glu Glu  
115 120 125  
Gln Lys Lys Gln Leu Ala Gln Asp Thr Gly Leu Thr Ile Leu Gln Val  
130 135 140

Asn Asn Trp Phe Ile Asn Ala Arg Arg Arg Ile Val Gln Pro Met Ile  
145 150 155 160

Asp Gln Ser Asn Arg Ala Gly Phe Leu Leu Asp Pro Ser Val Ser Gln  
165 170 175

Gly Ala Ala Tyr Ser Pro Xaa Gly Gln Pro Met Gly Ser Phe Val Leu  
180 185 190

Asp Gly Xaa Gln His Met Gly Ile Arg Pro Ala Gly Leu Gln Ser Met  
195 200 205

Pro Gly Asp Tyr Val Ser Gln Gly Gly Pro Met Gly Met Ser Xaa Ala  
210 215 220

Gln Pro Ser Tyr Thr Pro Pro Gln Met Thr Pro His Pro Thr Gln Leu  
225 230 235 240

Arg His Gly Pro Pro Met His Ser Tyr Leu Pro Ser His Pro His His  
245 250 255

Pro Ala Met Met Met His Gly Gly Pro Pro Thr His Pro Gly Met Thr  
260 265 270

Met Ser Ala Gln Ser Pro Thr Met Leu Asn Ser Val Asp Pro Asn Val  
275 280 285

Gly Gly Gln Val Met Asp Ile His Ala Gln  
290 295

<210> 1487

<211> 133

<212> PRT

<213> Homo sapiens

<400> 1487

His Gln Ala Ile Lys Pro Gly Tyr Ser Ala Glu Asn Val Ala His Thr  
1 5 10 15

Asp His Thr Leu Gly Cys Val Thr Ile Val Trp Cys Thr Cys Trp Lys  
20 25 30

Asn Ser Ser Met Leu Leu Gly Asp Ile Ile Ser Val Gly Asn Met Pro  
35 40 45

Leu Thr Asp Phe Phe Phe Phe Leu Phe Ala Val Gly Leu Gly Gln Leu  
50 55 60

Ile Gln Gln Ser Ile Phe Phe Phe Phe Leu Ser Pro Asn Leu Asn Arg  
65 70 75 80  
Ser Lys Met Cys Ser Gly Ile Pro Gly Asn Arg Cys Val Cys Lys Val  
85 90 95  
Lys Asn Arg Leu Phe Arg Asn Ser Leu Phe Arg Tyr Leu His Pro Ala  
100 105 110  
Ser His Val Lys Tyr Leu Ser Leu Lys Gly Leu Arg Cys Thr Ser Phe  
115 120 125  
Ile Ser Tyr Phe Ser  
130

<210> 1488  
<211> 42  
<212> PRT  
<213> Homo sapiens

<400> 1488  
Gln Arg Cys Pro Arg Cys Gly His Glu Gly Met Ala Tyr His Thr Arg  
1 5 10 15  
Gln Met Arg Ser Ala Asp Glu Gly Gln Thr Val Phe Tyr Thr Cys Thr  
20 25 30  
Asn Cys Lys Phe Gln Glu Lys Glu Asp Ser  
35 40

<210> 1489  
<211> 136  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (85)  
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1489  
His Glu Ala Ala Phe Val Leu Cys Leu Thr Met Pro Glu Pro Ala Lys  
1 5 10 15  
Ser Ala Pro Ala Pro Lys Lys Gly Ser Lys Lys Ala Val Thr Lys Ala  
20 25 30

Gln Lys Lys Asp Gly Lys Lys Arg Lys Arg Ser Arg Lys Glu Ser Tyr  
           35                                  40                                  45

Ser Ile Tyr Val Tyr Lys Val Leu Lys Gln Val His Pro Asp Thr Gly  
       50                                  55                                  60

Ile Ser Ser Lys Ala Met Gly Ile Met Asn Ser Phe Val Asn Asp Ile  
       65                                  70                                  75                                  80

Phe Glu Arg Ile Xaa Gly Glu Ala Ser Arg Leu Ala His Tyr Asn Lys  
                                   85                                  90                                  95

Arg Ser Thr Ile Thr Ser Arg Glu Ile Gln Thr Ala Val Arg Leu Leu  
                                   100                                  105                                  110

Leu Pro Gly Glu Leu Ala Lys His Ala Val Ser Glu Gly Thr Lys Ala  
                                   115                                  120                                  125

Val Thr Lys Tyr Thr Ser Ser Lys  
       130                                  135

<210> 1490

<211> 235

<212> PRT

<213> Homo sapiens

<400> 1490

Pro Leu Ser Pro Gly Ala Gln Leu Gly Arg Gly Ala Pro Thr Ser Ala  
       1                                  5                                  10                                  15

Phe Pro Pro Pro Ala Ala Glu Ala His Pro Ala Ala Arg Arg Gly Leu  
                                   20                                  25                                  30

Arg Ser Pro Gln Leu Pro Ser Gly Ala Met Ser Gln Asn Gly Ala Pro  
                                   35                                  40                                  45

Gly Met Gln Glu Glu Ser Leu Gln Gly Ser Trp Val Glu Leu His Phe  
       50                                  55                                  60

Ser Asn Asn Gly Asn Gly Gly Ser Val Pro Ala Ser Val Ser Ile Tyr  
       65                                  70                                  75                                  80

Asn Gly Asp Met Glu Lys Ile Leu Leu Asp Ala Gln His Glu Ser Gly  
                                   85                                  90                                  95

Arg Ser Ser Ser Lys Ser Ser His Cys Asp Ser Pro Pro Arg Ser Gln  
                                   100                                  105                                  110

Thr Pro Gln Asp Thr Asn Arg Ala Ser Glu Thr Asp Thr His Ser Ile

115	120	125
Gly Glu Lys Asn Ser Ser Gln Ser Glu Glu Asp Asp Ile Glu Arg Arg		
130	135	140
Lys Glu Val Glu Ser Ile Leu Lys Lys Asn Ser Asp Trp Ile Trp Asp		
145	150	155
Trp Ser Ser Arg Pro Glu Asn Ile Pro Pro Lys Glu Phe Leu Phe Lys		
	165	170
His Pro Lys Arg Thr Ala Thr Leu Ser Met Arg Asn Thr Ser Val Met		
	180	185
Lys Lys Gly Gly Ile Phe Ser Ala Glu Phe Leu Lys Val Phe Leu Pro		
	195	200
Ser Leu Leu Leu Ser His Leu Leu Ala Ile Gly Leu Gly Ile Tyr Ile		
	210	215
Gly Arg Arg Leu Thr Thr Ser Thr Ser Thr Phe		
225	230	235

&lt;210&gt; 1491

&lt;211&gt; 275

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (65)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1491

Lys Pro Glu Lys Lys Gly Val His Leu Asn Ser Asp Leu Pro Gln Met		
1	5	10
Gln His Leu Trp Ile Pro Leu Cys Ala Pro Asn Ser Leu Ser Gln Leu		
	20	25
Pro Ile Thr Asp Thr Ile Arg Lys Asp Ser Lys Glu Lys Lys Lys Arg		
	35	40
Lys Ala Ser Lys Leu Thr Leu Trp Gly Thr Tyr His Gly Met Thr Leu		
	50	55
Xaa Ser Val Thr Glu Gly Ala Ser Ala Arg Lys Thr Gln Thr Pro Ala		
65	70	75
		80

Ala Gln Pro Val Pro Arg Pro Val Ser Gln Ala Arg Pro Pro Pro Asn  
                     85                    90                    95  
 Gln Lys Lys Gly Ser Arg Thr Pro Ile Ile Ile Ile Pro Ala Ala Thr  
                     100                    105                    110  
 Thr Ser Leu Ile Thr Met Leu Asn Ala Lys Asp Leu Leu Gln Asp Leu  
                     115                    120                    125  
 Lys Phe Val Pro Ser Asp Glu Lys Lys Lys Gln Gly Cys Gln Arg Glu  
                     130                    135                    140  
 Asn Glu Thr Leu Ile Gln Arg Arg Lys Asp Gln Met Gln Pro Gly Gly  
                     145                    150                    155                    160  
 Thr Ala Ile Ser Val Thr Val Pro Tyr Arg Val Val Asp Gln Pro Leu  
                     165                    170                    175  
 Lys Leu Met Pro Gln Asp Trp Asp Arg Val Val Ala Val Phe Val Gln  
                     180                    185                    190  
 Gly Pro Ala Trp Gln Phe Lys Gly Trp Pro Trp Leu Leu Pro Asp Gly  
                     195                    200                    205  
 Ser Pro Val Asp Ile Phe Ala Lys Ile Lys Ala Phe His Leu Lys Tyr  
                     210                    215                    220  
 Asp Glu Val Arg Leu Asp Pro Asn Val Gln Lys Trp Asp Val Thr Val  
                     225                    230                    235                    240  
 Leu Glu Leu Ser Tyr His Lys Arg His Leu Asp Arg Pro Val Phe Leu  
                     245                    250                    255  
 Arg Phe Trp Glu Thr Leu Asp Arg Tyr Met Val Lys His Lys Ser His  
                     260                    265                    270  
 Leu Arg Phe  
                     275

<210> 1492  
 <211> 380  
 <212> PRT  
 <213> Homo sapiens

<400> 1492  
 Gly Leu Arg Leu Gly Ser Trp Ser Gly Glu Glu Lys Gly Ile Pro Thr  
   1                    5                    10                    15  
 Cys Gly Thr Leu Gly Gly Pro Arg Gly Arg Arg Leu Pro Ile Asp Cys

20	25	30
Gly Arg Cys Lys Gly Arg Ser Leu Trp Arg Leu Val Gly Val Leu Gly		
35	40	45
Ser Ala Gly Gly Gly Arg Gly Val Ser Glu Cys Glu Arg Gly Thr Gly		
50	55	60
Ile Pro Asn Leu Arg Ala Ser Arg Leu Trp Arg Arg Gly Gly Arg Ala		
65	70	75
Gln Ala Ala Met Arg Asp Arg Thr His Glu Leu Arg Gln Gly Asp Asp		
85	90	95
Ser Ser Asp Glu Glu Asp Lys Glu Arg Val Ala Leu Val Val His Pro		
100	105	110
Gly Thr Ala Arg Leu Gly Ser Pro Asp Glu Glu Phe Phe His Lys Val		
115	120	125
Arg Thr Ile Arg Gln Thr Ile Val Lys Leu Gly Asn Lys Val Gln Glu		
130	135	140
Leu Glu Lys Gln Gln Val Thr Ile Leu Ala Thr Pro Leu Pro Glu Glu		
145	150	155
Ser Met Lys Gln Glu Leu Gln Asn Leu Arg Asp Glu Ile Lys Gln Leu		
165	170	175
Gly Arg Glu Ile Arg Leu Gln Leu Lys Ala Ile Glu Pro Gln Lys Glu		
180	185	190
Glu Ala Asp Glu Asn Tyr Asn Ser Val Asn Thr Arg Met Arg Lys Thr		
195	200	205
Gln His Gly Val Leu Ser Gln Gln Phe Val Glu Leu Ile Asn Lys Cys		
210	215	220
Asn Ser Met Gln Ser Glu Tyr Arg Glu Lys Asn Val Glu Arg Ile Arg		
225	230	235
Arg Gln Leu Lys Ile Thr Asn Ala Gly Met Val Ser Asp Glu Glu Leu		
245	250	255
Glu Gln Met Leu Asp Ser Gly Gln Ser Glu Val Phe Val Ser Asn Ile		
260	265	270
Leu Lys Asp Thr Gln Val Thr Arg Gln Ala Leu Asn Glu Ile Ser Ala		
275	280	285
Arg His Ser Glu Ile Gln Gln Leu Glu Arg Ser Ile Arg Glu Leu His		

290	295	300
Asp Ile Phe Thr Phe Leu Ala Thr Glu Val Glu Met Gln Gly Glu Met		
305	310	315 320
Ile Asn Arg Ile Glu Lys Asn Ile Leu Ser Ser Ala Asp Tyr Val Glu		
	325	330 335
Arg Gly Gln Glu His Val Lys Thr Ala Leu Glu Asn Gln Lys Lys Ala		
	340	345 350
Arg Lys Lys Lys Val Leu Ile Ala Ile Cys Val Ser Ile Thr Val Val		
	355	360 365
Leu Leu Ala Val Ile Ile Gly Val Thr Val Val Gly		
	370	375 380

&lt;210&gt; 1493

&lt;211&gt; 88

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (10)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (29)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (73)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1493

Ala Gln Lys Glu Leu Thr Lys Ala His Xaa Leu Glu Val Arg Leu His
1 5 10 15

Thr Phe Ser Met Phe Gly Met Pro Arg Leu Pro Pro Xaa Asp Arg Arg
20 25 30

His Trp Glu Ile Gly Glu Gly Gly Asp Ser Gly Leu Thr Ile Glu Lys
35 40 45

Ser Trp Arg Glu Leu Val Pro Gly His Lys Glu Met Ser Gln Glu Leu
50 55 60



Cys His Gln Gln Glu Ala Leu Trp Xaa Leu Leu Thr Thr Glu Leu Ile  
 65 70 75 80

Leu Arg Glu Lys Ala Ser Arg Ser  
 85

<210> 1494

<211> 469

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (299)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1494

Thr Ser Trp Met His Thr Arg Phe Ser Arg Arg Asn Trp Gly Lys Arg  
 1 5 10 15

Thr Gly Thr Val Gln Val Leu Lys Arg Ser Gly Arg Glu Leu Ile Glu  
 20 25 30

Asn Ser Arg Asp Asp Thr Thr Trp Val Lys Gly Gln Leu Gln Glu Leu  
 35 40 45

Ser Thr Arg Trp Asp Thr Val Cys Lys Leu Ser Val Ser Lys Gln Ser  
 50 55 60

Arg Leu Glu Gln Ala Leu Lys Gln Ala Glu Val Phe Arg Asp Thr Val  
 65 70 75 80

His Met Leu Leu Glu Trp Leu Ser Glu Ala Glu Gln Thr Leu Arg Phe  
 85 90 95

Arg Gly Ala Leu Pro Asp Asp Thr Glu Ala Leu Gln Ser Leu Ile Asp  
 100 105 110

Thr His Lys Glu Phe Met Lys Lys Val Glu Glu Lys Arg Val Asp Val  
 115 120 125

Asn Ser Ala Val Ala Met Gly Glu Val Ile Leu Ala Val Cys His Pro  
 130 135 140

Asp Cys Ile Thr Thr Ile Lys His Trp Ile Thr Ile Ile Arg Ala Arg  
 145 150 155 160

Phe Glu Glu Val Leu Thr Trp Ala Lys Gln His Gln Gln Arg Leu Glu

165	170	175
Thr Ala Leu Ser Glu Leu Val Ala Asn Ala Glu Leu Leu Glu Glu Leu		
180	185	190
Leu Ala Trp Ile Gln Trp Ala Glu Thr Thr Leu Ile Gln Arg Asp Gln		
195	200	205
Glu Pro Ile Pro Gln Asn Ile Asp Arg Val Lys Ala Leu Ile Ala Glu		
210	215	220
His Gln Thr Phe Met Glu Glu Met Thr Arg Lys Gln Pro Asp Val Asp		
225	230	235
Arg Val Thr Lys Thr Tyr Lys Arg Lys Asn Ile Glu Pro Thr His Ala		
245	250	255
Pro Phe Ile Glu Lys Ser Arg Ser Gly Gly Arg Lys Ser Leu Ser Gln		
260	265	270
Pro Thr Pro Pro Pro Met Pro Ile Leu Ser Gln Ser Glu Ala Lys Asn		
275	280	285
Pro Arg Ile Asn Gln Leu Ser Ala Arg Trp Xaa Gln Val Trp Leu Leu		
290	295	300
Ala Leu Glu Arg Gln Arg Lys Leu Asn Asp Ala Leu Asp Arg Leu Glu		
305	310	315
Glu Leu Lys Glu Phe Ala Asn Phe Asp Phe Asp Val Trp Arg Lys Lys		
325	330	335
Tyr Met Arg Trp Met Asn His Lys Lys Ser Arg Val Met Asp Phe Phe		
340	345	350
Arg Arg Ile Asp Lys Asp Gln Asp Gly Lys Ile Thr Arg Gln Glu Phe		
355	360	365
Ile Asp Gly Ile Leu Ala Ser Lys Phe Pro Thr Thr Lys Leu Glu Met		
370	375	380
Thr Ala Val Ala Asp Ile Phe Asp Arg Asp Gly Asp Gly Tyr Ile Asp		
385	390	395
Tyr Tyr Glu Phe Val Ala Ala Leu His Pro Asn Lys Asp Ala Tyr Arg		
405	410	415
Pro Thr Thr Asp Ala Asp Lys Ile Glu Asp Glu Val Thr Arg Gln Val		
420	425	430
Ala Gln Cys Lys Cys Ala Lys Arg Phe Gln Val Glu Gln Ile Gly Glu		

435                      440                      445  
 Asn Lys Tyr Arg Val Arg Lys Arg Lys Ser Ser Pro Leu Leu Trp Trp  
 450                      455                      460  
  
 Phe Leu Ile Cys Gly  
 465  
  
 <210> 1495  
 <211> 366  
 <212> PRT  
 <213> Homo sapiens  
  
 <400> 1495  
 Thr Asn Tyr Ile Ser Arg Gln Ala Ala Glu Gly Gly Arg Val Glu Gly  
 1                      5                      10                      15  
  
 Pro Pro Leu Arg Pro Pro Ala Thr Ser Arg Arg Trp Ala Gly Pro Thr  
 20                      25                      30  
  
 Leu Trp Arg Met Glu Val Thr Gly Asp Ala Gly Val Pro Glu Ser Gly  
 35                      40                      45  
  
 Glu Ile Arg Thr Leu Lys Pro Cys Leu Leu Arg Arg Asn Tyr Ser Arg  
 50                      55                      60  
  
 Glu Gln His Gly Val Ala Ala Ser Cys Leu Glu Asp Leu Arg Ser Lys  
 65                      70                      75                      80  
  
 Ala Cys Asp Ile Leu Ala Ile Asp Lys Ser Leu Thr Pro Val Thr Leu  
 85                      90                      95  
  
 Val Leu Ala Glu Asp Gly Thr Ile Val Asp Asp Asp Asp Tyr Phe Leu  
 100                      105                      110  
  
 Cys Leu Pro Ser Asn Thr Lys Phe Val Ala Leu Ala Ser Asn Glu Lys  
 115                      120                      125  
  
 Trp Ala Tyr Asn Asn Ser Asp Gly Gly Thr Ala Trp Ile Ser Gln Glu  
 130                      135                      140  
  
 Ser Phe Asp Val Asp Glu Thr Asp Ser Gly Ala Gly Leu Lys Trp Lys  
 145                      150                      155                      160  
  
 Asn Val Ala Arg Gln Leu Lys Glu Asp Leu Ser Ser Ile Ile Leu Leu  
 165                      170                      175  
  
 Ser Glu Glu Asp Leu Gln Met Leu Val Asp Ala Pro Cys Ser Asp Leu  
 180                      185                      190

Ala Gln Glu Leu Arg Gln Ser Cys Ala Thr Val Gln Arg Leu Gln His  
195 200 205

Thr Leu Gln Gln Val Leu Asp Gln Arg Glu Glu Val Arg Gln Ser Lys  
210 215 220

Gln Leu Leu Gln Leu Tyr Leu Gln Ala Leu Glu Lys Glu Gly Ser Leu  
225 230 235 240

Leu Ser Lys Gln Glu Glu Ser Lys Ala Ala Phe Gly Glu Glu Val Asp  
245 250 255

Ala Val Asp Thr Gly Ile Ser Arg Glu Thr Ser Ser Asp Val Ala Leu  
260 265 270

Ala Ser His Ile Leu Thr Ala Leu Arg Glu Lys Gln Ala Pro Glu Leu  
275 280 285

Ser Leu Ser Ser Gln Asp Leu Glu Leu Val Thr Lys Glu Asp Pro Lys  
290 295 300

Ala Leu Ala Val Ala Leu Asn Trp Asp Ile Lys Lys Thr Glu Thr Val  
305 310 315 320

Gln Glu Ala Cys Glu Arg Glu Leu Ala Leu Arg Leu Gln Gln Thr Gln  
325 330 335

Ser Leu His Ser Leu Arg Ser Ile Ser Ala Ser Lys Ala Ser Pro Pro  
340 345 350

Gly Asp Leu Gln Asn Pro Lys Arg Ala Arg Gln Asp Pro Thr  
355 360 365

<210> 1496

<211> 578

<212> PRT

<213> Homo sapiens

<400> 1496

Phe Pro Phe Glu Leu Val Thr Asn Pro Asp Phe Ser Pro Thr Pro Val  
1 5 10 15

Thr Phe Glu Lys Ala Leu Asn Ala Gly Phe Ile Gln Ala Thr Asp Tyr  
20 25 30

Val Glu Ile Trp Gln Ala Tyr Leu Asp Tyr Leu Arg Arg Arg Val Asp  
35 40 45

Phe Lys Gln Asp Ser Ser Lys Glu Leu Glu Glu Leu Arg Ala Ala Phe  
 50 55 60  
 Thr Arg Ala Leu Glu Tyr Leu Lys Gln Glu Val Glu Glu Arg Phe Asn  
 65 70 75 80  
 Glu Ser Gly Asp Pro Ser Cys Val Ile Met Gln Asn Trp Ala Arg Ile  
 85 90 95  
 Glu Ala Arg Leu Cys Asn Asn Met Gln Lys Ala Arg Glu Leu Trp Asp  
 100 105 110  
 Ser Ile Met Thr Arg Gly Asn Ala Lys Tyr Ala Asn Met Trp Leu Glu  
 115 120 125  
 Tyr Tyr Asn Leu Glu Arg Ala His Gly Asp Thr Gln His Cys Arg Lys  
 130 135 140  
 Ala Leu His Arg Ala Val Gln Cys Thr Ser Asp Tyr Pro Glu His Val  
 145 150 155 160  
 Cys Glu Val Leu Leu Thr Met Glu Arg Thr Glu Gly Ser Leu Glu Asp  
 165 170 175  
 Trp Asp Ile Ala Val Gln Lys Thr Glu Thr Arg Leu Ala Arg Val Asn  
 180 185 190  
 Glu Gln Arg Met Lys Ala Ala Glu Lys Glu Ala Ala Leu Val Gln Gln  
 195 200 205  
 Glu Glu Glu Lys Ala Glu Gln Arg Lys Arg Ala Arg Ala Glu Lys Lys  
 210 215 220  
 Ala Leu Lys Lys Lys Lys Lys Ile Arg Gly Pro Glu Lys Arg Gly Ala  
 225 230 235 240  
 Asp Glu Asp Asp Glu Lys Glu Trp Gly Asp Asp Glu Glu Glu Gln Pro  
 245 250 255  
 Ser Lys Arg Arg Arg Val Glu Asn Ser Ile Pro Ala Ala Gly Glu Thr  
 260 265 270  
 Gln Asn Val Glu Val Ala Ala Gly Pro Ala Gly Lys Cys Ala Ala Val  
 275 280 285  
 Asp Val Glu Pro Pro Ser Lys Gln Lys Glu Lys Ala Ala Ser Leu Lys  
 290 295 300  
 Arg Asp Met Pro Lys Val Leu His Asp Ser Ser Lys Asp Ser Ile Thr  
 305 310 315 320

Val Phe Val Ser Asn Leu Pro Tyr Ser Met Gln Glu Pro Asp Thr Lys  
325 330 335

Leu Arg Pro Leu Phe Glu Ala Cys Gly Glu Val Val Gln Ile Arg Pro  
340 345 350

Ile Phe Ser Asn Arg Gly Asp Phe Arg Gly Tyr Cys Tyr Val Glu Phe  
355 360 365

Lys Glu Glu Lys Ser Ala Leu Gln Ala Leu Glu Met Asp Arg Lys Ser  
370 375 380

Val Glu Gly Arg Pro Met Phe Val Ser Pro Cys Val Asp Lys Ser Lys  
385 390 395 400

Asn Pro Asp Phe Lys Val Phe Arg Tyr Ser Thr Ser Leu Glu Lys His  
405 410 415

Lys Leu Phe Ile Ser Gly Leu Pro Phe Ser Cys Thr Lys Glu Glu Leu  
420 425 430

Glu Glu Ile Cys Lys Ala His Gly Thr Val Lys Asp Leu Arg Leu Val  
435 440 445

Thr Asn Arg Ala Gly Lys Pro Lys Gly Leu Ala Tyr Val Glu Tyr Glu  
450 455 460

Asn Glu Ser Gln Ala Ser Gln Ala Val Met Lys Met Asp Gly Met Thr  
465 470 475 480

Ile Lys Glu Asn Ile Ile Lys Val Ala Ile Ser Asn Pro Pro Gln Arg  
485 490 495

Lys Val Pro Glu Lys Pro Glu Thr Arg Lys Ala Pro Gly Gly Pro Met  
500 505 510

Leu Leu Pro Gln Thr Tyr Gly Ala Arg Gly Lys Gly Arg Thr Gln Leu  
515 520 525

Ser Leu Leu Pro Arg Ala Leu Gln Arg Pro Ser Ala Ala Ala Pro Gln  
530 535 540

Ala Glu Asn Gly Pro Ala Ala Ala Pro Ala Val Ala Ala Pro Ala Ala  
545 550 555 560

Thr Glu Ala Pro Lys Met Ser Asn Ala Asp Phe Ala Lys Leu Phe Leu  
565 570 575

Arg Lys

<210> 1497  
<211> 316  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (62)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (214)  
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1497  
Pro Trp Ser Ala Ala Ala Gly Leu Arg Ala Gly Val Arg Val Pro Arg  
1 5 10 15  
Ser Pro Gly Pro Ser Arg Arg Met Pro Ala Arg Ser Gly Ala Gln Phe  
20 25 30  
Cys Arg Arg Met Gly Gln Lys Lys Gln Arg Pro Ala Arg Ala Gly Gln  
35 40 45  
Pro His Ser Ser Ser Asp Ala Ala Gln Ala Pro Ala Glu Xaa Pro His  
50 55 60  
Ser Ser Ser Asp Ala Ala Gln Ala Pro Cys Pro Arg Glu Arg Cys Leu  
65 70 75 80  
Gly Pro Pro Thr Thr Pro Gly Pro Tyr Arg Ser Ile Tyr Phe Ser Ser  
85 90 95  
Pro Lys Gly His Leu Thr Arg Leu Gly Leu Glu Phe Phe Asp Gln Pro  
100 105 110  
Ala Val Pro Leu Ala Arg Ala Phe Leu Gly Gln Val Leu Val Arg Arg  
115 120 125  
Leu Pro Asn Gly Thr Glu Leu Arg Gly Arg Ile Val Glu Thr Glu Ala  
130 135 140  
Tyr Leu Gly Pro Glu Asp Glu Ala Ala His Ser Arg Gly Gly Arg Gln  
145 150 155 160  
Thr Pro Arg Asn Arg Gly Met Phe Met Lys Pro Gly Thr Leu Tyr Val  
165 170 175

Tyr Ile Ile Tyr Gly Met Tyr Phe Cys Met Asn Ile Ser Ser Gln Gly  
 180 185 190

Asp Gly Ala Cys Val Leu Leu Arg Ala Leu Glu Pro Leu Glu Gly Leu  
 195 200 205

Glu Thr Met Arg Gln Xaa Arg Ser Thr Leu Arg Lys Gly Thr Ala Ser  
 210 215 220

Arg Val Leu Lys Asp Arg Glu Leu Cys Ser Gly Pro Ser Lys Leu Cys  
 225 230 235 240

Gln Ala Leu Ala Ile Asn Lys Ser Phe Asp Gln Arg Asp Leu Ala Gln  
 245 250 255

Asp Glu Ala Val Trp Leu Glu Arg Gly Pro Leu Glu Pro Ser Glu Pro  
 260 265 270

Ala Val Val Ala Ala Ala Arg Val Gly Val Gly His Ala Gly Glu Trp  
 275 280 285

Ala Arg Lys Pro Leu Arg Phe Tyr Val Arg Gly Ser Pro Trp Val Ser  
 290 295 300

Val Val Asp Arg Val Ala Glu Gln Asp Thr Gln Ala  
 305 310 315

<210> 1498

<211> 82

<212> PRT

<213> Homo sapiens

<400> 1498

Lys Cys Asn Tyr Val Leu Ser Ala Ser Lys Phe Lys Thr Tyr Trp Asn  
 1 5 10 15

Val Glu Ser Val Val Thr Lys Tyr Val Arg Arg Thr Lys Gly Met Cys  
 20 25 30

Lys Ser Leu Met Pro Ile Ser Ser Glu Asn Leu Ser Lys Leu Thr Gly  
 35 40 45

Pro Ala Glu Thr Ala His Ser Ala Arg Arg Asn His Asp Ile Ala Leu  
 50 55 60

Pro Cys Gly Arg Ser Thr Cys Leu Glu Asn Thr Val Leu Tyr Tyr His  
 65 70 75 80

Tyr Gly



<210> 1499  
<211> 75  
<212> PRT  
<213> Homo sapiens

<400> 1499  
Ser Cys Cys Leu Glu Asn Tyr Ser Phe Leu Ser Trp Ser Ala Asp Arg  
1 5 10 15  
Asn Ser His Thr Asn Leu Ile Gly Leu Lys Cys Ile Phe Arg Gln Gln  
20 25 30  
Gly Thr Lys Gln Arg Gly Thr Gly Leu Leu Asp Trp Arg Lys Ser Leu  
35 40 45  
Leu Ala Trp Trp Ala Val Phe Gln Glu Arg Pro Cys Pro Cys Ser Leu  
50 55 60  
Leu Gly Thr Phe Gln Phe Arg Phe Pro Leu Val  
65 70 75

<210> 1500  
<211> 144  
<212> PRT  
<213> Homo sapiens

<400> 1500  
Lys Arg Ser Trp Ala Gly Gly Arg Ala Arg Arg Lys Leu Phe Gly Gly  
1 5 10 15  
Leu Val Trp Ile Leu Val Ala Ser Ser Asn Val Pro Leu Pro Leu Leu  
20 25 30  
Gln Gly Trp Val Met Phe Val Ser Val Thr Ala Phe Phe Phe Ser Leu  
35 40 45  
Leu Phe Leu Gly Met Phe Leu Ser Gly Met Val Ala Gln Ile Asp Ala  
50 55 60  
Asn Trp Asn Phe Leu Asp Phe Ala Tyr His Phe Thr Val Phe Val Phe  
65 70 75 80  
Tyr Phe Gly Ala Phe Leu Leu Glu Ala Ala Ala Thr Ser Leu His Asp  
85 90 95

Leu His Cys Asn Thr Thr Ile Thr Gly Gln Pro Leu Leu Ser Asp Asn  
100 105 110  
Gln Tyr Asn Ile Asn Val Ala Ala Ser Ile Phe Ala Phe Met Thr Thr  
115 120 125  
Ala Cys Tyr Gly Cys Ser Leu Gly Leu Ala Leu Arg Arg Trp Arg Pro  
130 135 140

<210> 1501  
<211> 123  
<212> PRT  
<213> Homo sapiens

<400> 1501  
Val Leu Pro Gly Gly Ser Leu Lys Val Gln Lys Cys Cys Pro Lys Pro  
1 5 10 15  
Ser Leu Asn Ile Ser Gly Asn Arg Ser Cys Ser Thr Met Gly Val Gln  
20 25 30  
Cys Pro Cys Leu Pro Leu Thr Gln Leu Trp Phe Ile Leu Leu Val Cys  
35 40 45  
Leu His Arg Pro Asp Ala Arg Val Pro Cys Leu Ile Leu His Leu Leu  
50 55 60  
Ser His Trp Gly Ser Leu Pro Ser Asp Ala Leu Ala Lys Ile Ala Leu  
65 70 75 80  
Val Cys Ser Arg Lys Glu Gly Gln Ile Pro Gly Ile Val Arg Ala Ala  
85 90 95  
Glu Leu Tyr Arg Ile Gly Leu Pro Phe Pro Pro Val Trp Leu Ala Leu  
100 105 110  
His Ser Leu Gln Ile Pro Pro Thr Ser Thr Gln  
115 120

<210> 1502  
<211> 426  
<212> PRT  
<213> Homo sapiens

&lt;400&gt; 1502

Glu	Ile	Tyr	Ser	Leu	Ser	Arg	Phe	Ile	Glu	Val	Lys	Met	Ser	Lys	Lys
1				5					10					15	
Ile	Ser	Gly	Gly	Ser	Val	Val	Glu	Met	Gln	Gly	Asp	Glu	Met	Thr	Arg
			20					25					30		
Ile	Ile	Trp	Glu	Leu	Ile	Lys	Glu	Lys	Leu	Ile	Phe	Pro	Tyr	Val	Glu
		35					40					45			
Leu	Asp	Leu	His	Ser	Tyr	Asp	Leu	Gly	Ile	Glu	Asn	Arg	Asp	Ala	Thr
	50					55					60				
Asn	Asp	Gln	Val	Thr	Lys	Asp	Ala	Ala	Glu	Ala	Ile	Lys	Lys	His	Asn
65					70					75					80
Val	Gly	Val	Lys	Cys	Ala	Thr	Ile	Thr	Pro	Asp	Glu	Lys	Arg	Val	Glu
			85						90					95	
Glu	Phe	Lys	Leu	Lys	Gln	Met	Trp	Lys	Ser	Pro	Asn	Gly	Thr	Ile	Arg
		100						105					110		
Asn	Ile	Leu	Gly	Gly	Thr	Val	Phe	Arg	Glu	Ala	Ile	Ile	Cys	Lys	Asn
	115						120					125			
Ile	Pro	Arg	Leu	Val	Ser	Gly	Trp	Val	Lys	Pro	Ile	Ile	Ile	Gly	Arg
	130					135					140				
His	Ala	Tyr	Gly	Asp	Gln	Tyr	Arg	Ala	Thr	Asp	Phe	Val	Val	Pro	Gly
145					150					155					160
Pro	Gly	Lys	Val	Glu	Ile	Thr	Tyr	Thr	Pro	Ser	Asp	Gly	Thr	Gln	Lys
			165						170					175	
Val	Thr	Tyr	Leu	Val	His	Asn	Phe	Glu	Glu	Gly	Gly	Gly	Val	Ala	Met
		180						185					190		
Gly	Met	Tyr	Asn	Gln	Asp	Lys	Ser	Ile	Glu	Asp	Phe	Ala	His	Ser	Ser
	195						200					205			
Phe	Gln	Met	Ala	Leu	Ser	Lys	Gly	Trp	Pro	Leu	Tyr	Leu	Ser	Thr	Lys
	210					215					220				
Asn	Thr	Ile	Leu	Lys	Lys	Tyr	Asp	Gly	Arg	Phe	Lys	Asp	Ile	Phe	Gln
225					230					235					240
Glu	Ile	Tyr	Asp	Lys	Gln	Tyr	Lys	Ser	Gln	Phe	Glu	Ala	Gln	Lys	Ile
			245						250					255	
Trp	Tyr	Glu	His	Arg	Leu	Ile	Asp	Asp	Met	Val	Ala	Gln	Ala	Met	Lys
		260						265					270		

Ser Glu Gly Gly Phe Ile Trp Ala Cys Lys Asn Tyr Asp Gly Asp Val  
 275 280 285

Gln Ser Asp Ser Val Ala Gln Gly Tyr Gly Ser Leu Gly Met Met Thr  
 290 295 300

Ser Val Leu Val Cys Pro Asp Gly Lys Thr Val Glu Ala Glu Ala Ala  
 305 310 315 320

His Gly Thr Val Thr Arg His Tyr Arg Met Tyr Gln Lys Gly Gln Glu  
 325 330 335

Thr Ser Thr Asn Pro Ile Ala Ser Ile Phe Ala Trp Thr Arg Gly Leu  
 340 345 350

Ala His Arg Ala Lys Leu Asp Asn Asn Lys Glu Leu Ala Phe Phe Ala  
 355 360 365

Asn Ala Leu Glu Glu Val Ser Ile Glu Thr Ile Glu Ala Gly Phe Met  
 370 375 380

Thr Lys Asp Leu Ala Ala Cys Ile Lys Gly Leu Pro Asn Val Gln Arg  
 385 390 395 400

Ser Asp Tyr Leu Asn Thr Phe Glu Phe Met Asp Lys Leu Gly Glu Asn  
 405 410 415

Leu Lys Ile Lys Leu Ala Gln Ala Lys Leu  
 420 425

<210> 1503

<211> 65

<212> PRT

<213> Homo sapiens

<400> 1503

Phe Asn Lys Arg Lys Met Lys Tyr Ser Val Ala Tyr Ile Phe His Arg  
 1 5 10 15

Ala His Glu His Leu Leu Tyr Leu Leu Gly Leu Ala Lys Ile Ile Tyr  
 20 25 30

Ser Ala Ala Leu Pro Lys Cys Leu His Thr Lys Leu Lys Val Val Leu  
 35 40 45

Ile Tyr Val Ser Trp Lys Leu Phe Ile Lys Phe Lys Gly Ile Ser Phe  
 50 55 60

Arg  
65

<210> 1504  
<211> 82  
<212> PRT  
<213> Homo sapiens

<400> 1504  
Phe Phe Val Ile Pro Ser Ser Gly Ser Ile Cys Phe Cys Ser Leu Val  
1 5 10 15  
Thr Val Leu Met Phe Asn Cys Cys Thr Leu Lys Pro Lys Ser Val Thr  
20 25 30  
Met His Thr Val Thr Lys Val Leu Gly Leu Gln Ser Cys Leu Leu Tyr  
35 40 45  
Lys Glu Asn Phe Lys Cys Cys Cys Lys Leu Thr Ser Tyr Thr Ile Leu  
50 55 60  
Asn Phe Leu Ser Ser Pro Leu Phe Leu Pro Thr Asn Gly Ile Ile Met  
65 70 75 80  
Leu Ala

<210> 1505  
<211> 82  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (63)  
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1505  
Glu Gly Cys Ala Ala Ala Met Ala Leu Arg Met Leu Trp Ala Gly Gln  
1 5 10 15  
Ala Lys Gly Ile Leu Gly Gly Trp Gly Ile Ile Cys Leu Val Met Ser  
20 25 30  
Leu Leu Leu Gln His Pro Gly Val Tyr Ser Lys Cys Tyr Phe Gln Ala  
35 40 45

Gln Ala Pro Cys His Tyr Glu Gly Lys Tyr Phe Thr Leu Gly Xaa Ser  
 50 55 60

Trp Leu Arg Lys Asp Cys Phe His Cys Thr Cys Leu His Pro Val Ala  
 65 70 75 80

Trp Ala

<210> 1506

<211> 419

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (404)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (405)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1506

Ala Arg Val Asp Arg Glu Thr Arg Ala Leu Ala Asp Ser His Phe Arg  
 1 5 10 15

Gly Leu Gly Val Asp Val Pro Gly Val Gly Gln Ala Pro Gly Arg Val  
 20 25 30

Ala Phe Val Ser Glu Pro Gly Ala Phe Ser Tyr Ala Asp Phe Val Arg  
 35 40 45

Gly Phe Leu Leu Pro Asn Leu Pro Cys Val Phe Ser Ser Ala Phe Thr  
 50 55 60

Gln Gly Trp Gly Ser Arg Arg Arg Trp Val Thr Pro Ala Gly Arg Pro  
 65 70 75 80

Asp Phe Asp His Leu Leu Arg Thr Tyr Gly Asp Val Val Val Pro Val  
 85 90 95

Ala Asn Cys Gly Val Gln Glu Tyr Asn Ser Asn Pro Lys Glu His Met  
 100 105 110

Thr Leu Arg Asp Tyr Ile Thr Tyr Trp Lys Glu Tyr Ile Gln Ala Gly  
 115 120 125

Tyr Ser Ser Pro Arg Gly Cys Leu Tyr Leu Lys Asp Trp His Leu Cys  
130 135 140

Arg Asp Phe Pro Val Glu Asp Val Phe Thr Leu Pro Val Tyr Phe Ser  
145 150 155 160

Ser Asp Trp Leu Asn Glu Phe Trp Asp Ala Leu Asp Val Asp Asp Tyr  
165 170 175

Arg Phe Val Tyr Ala Gly Pro Ala Gly Ser Trp Ser Pro Phe His Ala  
180 185 190

Asp Ile Phe Arg Ser Phe Ser Trp Ser Val Asn Val Cys Gly Arg Lys  
195 200 205

Lys Trp Leu Leu Phe Pro Pro Gly Gln Glu Glu Ala Leu Arg Asp Arg  
210 215 220

His Gly Asn Leu Pro Tyr Asp Val Thr Ser Pro Ala Leu Cys Asp Thr  
225 230 235 240

His Leu His Pro Arg Asn Gln Leu Ala Gly Pro Pro Leu Glu Ile Thr  
245 250 255

Gln Glu Ala Gly Glu Met Val Phe Val Pro Ser Gly Trp His His Gln  
260 265 270

Val His Asn Leu Asp Asp Thr Ile Ser Ile Asn His Asn Trp Val Asn  
275 280 285

Gly Phe Asn Leu Ala Asn Met Trp Arg Phe Leu Gln Gln Glu Leu Cys  
290 295 300

Ala Val Gln Glu Glu Val Ser Glu Trp Arg Asp Ser Met Pro Asp Trp  
305 310 315 320

His His His Cys Gln Val Ile Met Arg Ser Cys Ser Gly Ile Asn Phe  
325 330 335

Glu Glu Phe Tyr His Phe Leu Lys Val Ile Ala Glu Lys Arg Leu Leu  
340 345 350

Val Leu Arg Glu Ala Ala Ala Glu Asp Gly Ala Gly Leu Gly Phe Glu  
355 360 365

Gln Ala Ala Phe Asp Val Gly Arg Ile Thr Glu Val Leu Ala Ser Leu  
370 375 380

Val Ala His Pro Asp Phe Gln Arg Val Asp Thr Ser Ala Phe Ser Pro  
385 390 395 400

Gln Pro Lys Xaa Xaa Leu Gln Gln Leu Arg Glu Ala Val Asp Ala Ala  
405 410 415

Ala Ala Pro

<210> 1507

<211> 220

<212> PRT

<213> Homo sapiens

<400> 1507

Pro Arg Val Arg Ser Gly Arg Thr Ile Met Gln Ser Ala Met Phe Leu  
1 5 10 15

Ala Val Gln His Asp Cys Arg Pro Met Asp Lys Ser Ala Gly Ser Gly  
20 25 30

His Lys Ser Glu Glu Lys Arg Glu Lys Met Lys Arg Thr Leu Leu Lys  
35 40 45

Asp Trp Lys Thr Arg Leu Ser Tyr Phe Leu Gln Asn Ser Ser Thr Pro  
50 55 60

Gly Lys Pro Lys Thr Gly Lys Lys Ser Lys Gln Gln Ala Phe Ile Lys  
65 70 75 80

Pro Ser Pro Glu Glu Ala Gln Leu Trp Ser Glu Ala Phe Asp Glu Leu  
85 90 95

Leu Ala Ser Lys Tyr Gly Leu Ala Ala Phe Arg Ala Phe Leu Lys Ser  
100 105 110

Glu Phe Cys Glu Glu Asn Ile Glu Phe Trp Leu Ala Cys Glu Asp Phe  
115 120 125

Lys Lys Thr Lys Ser Pro Gln Lys Leu Ser Ser Lys Ala Arg Lys Ile  
130 135 140

Tyr Thr Asp Phe Ile Glu Lys Glu Ala Pro Lys Glu Ile Asn Ile Asp  
145 150 155 160

Phe Gln Thr Lys Thr Leu Ile Ala Gln Asn Ile Gln Glu Ala Thr Ser  
165 170 175

Gly Cys Phe Thr Thr Ala Gln Lys Arg Val Tyr Ser Leu Met Glu Asn  
180 185 190

Asn Ser Tyr Pro Arg Phe Leu Glu Ser Glu Phe Tyr Gln Asp Leu Cys



195

200

205

Lys Lys Pro Gln Ile Thr Thr Glu Pro His Ala Thr  
 210 215 220

&lt;210&gt; 1508

&lt;211&gt; 339

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1508

Phe Gly Thr Arg Arg Ser Gly Cys Pro Ala Arg Gly His Ser Glu Pro  
 1 5 10 15

Gly Gly Arg Glu Glu Gly Gly Met Pro Gln Thr Val Ile Leu Pro Gly  
 20 25 30

Pro Ala Pro Trp Gly Phe Arg Leu Ser Gly Gly Ile Asp Phe Asn Gln  
 35 40 45

Pro Leu Val Ile Thr Arg Ile Thr Pro Gly Ser Lys Ala Ala Ala Ala  
 50 55 60

Asn Leu Cys Pro Gly Asp Val Ile Leu Ala Ile Asp Gly Phe Gly Thr  
 65 70 75 80

Glu Ser Met Thr His Ala Asp Ala Gln Asp Arg Ile Lys Ala Ala Ala  
 85 90 95

His Gln Leu Cys Leu Lys Ile Asp Arg Gly Glu Thr His Leu Trp Ser  
 100 105 110

Pro Gln Val Ser Glu Asp Gly Lys Ala His Pro Phe Lys Ile Asn Leu  
 115 120 125

Glu Ser Glu Pro Gln Glu Phe Lys Pro Ile Gly Thr Ala His Asn Arg  
 130 135 140

Arg Ala Gln Pro Phe Val Ala Ala Ala Asn Ile Asp Asp Lys Arg Gln  
 145 150 155 160

Val Val Ser Ala Ser Tyr Asn Ser Pro Ile Gly Leu Tyr Ser Thr Ser  
 165 170 175

Asn Ile Gln Asp Ala Leu His Gly Gln Leu Arg Gly Leu Ile Pro Ser  
 180 185 190

Ser Pro Gln Asn Glu Pro Thr Ala Ser Val Pro Pro Glu Ser Asp Val  
 195 200 205

Tyr Arg Met Leu His Asp Asn Arg Asn Glu Pro Thr Gln Pro Arg Gln  
 210 215 220  
 Ser Gly Ser Phe Arg Val Leu Gln Gly Met Val Asp Asp Gly Ser Asp  
 225 230 235 240  
 Asp Arg Pro Ala Gly Thr Arg Ser Val Arg Ala Pro Val Thr Lys Val  
 245 250 255  
 His Gly Gly Ser Gly Gly Ala Gln Arg Met Pro Leu Cys Asp Lys Cys  
 260 265 270  
 Gly Ser Gly Ile Val Gly Ala Val Val Lys Ala Arg Asp Lys Tyr Arg  
 275 280 285  
 His Pro Glu Cys Phe Val Cys Ala Asp Cys Asn Leu Asn Leu Lys Gln  
 290 295 300  
 Lys Gly Tyr Phe Phe Ile Glu Gly Glu Leu Tyr Cys Glu Thr His Ala  
 305 310 315 320  
 Arg Ala Arg Thr Lys Pro Pro Glu Gly Tyr Asp Thr Val Thr Leu Tyr  
 325 330 335  
 Pro Lys Ala

&lt;210&gt; 1509

&lt;211&gt; 388

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (226)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1509

Leu Gly Arg Val Ser Met Ser Leu Gly Trp Leu Glu Arg Pro Pro Ala  
 1 5 10 15

Leu Ser Arg Ala Ala Gly Asp Gly Ala Arg Arg Leu Ser Gly Ser Arg  
 20 25 30

Arg Gly Asp Val Trp Leu Thr Ser Ser Ala Ala Gly Leu Leu Arg Ser  
 35 40 45

Val Ala Gly Gly Ser Trp Cys Gly Gly Gln Leu Arg Ala Arg Gly Gly

50                                      55                                      60  
 Ser Gly Arg Cys Val Ala Arg Ala Met Thr Gly Asn Ala Gly Glu Trp  
 65                                      70                                      75                                      80  
 Cys Leu Met Glu Ser Asp Pro Gly Val Phe Thr Glu Leu Ile Lys Gly  
                                     85                                      90                                      95  
 Phe Gly Cys Arg Gly Ala Gln Val Glu Glu Ile Trp Ser Leu Glu Pro  
                                     100                                      105                                      110  
 Glu Asn Phe Glu Lys Leu Lys Pro Val His Gly Leu Ile Phe Leu Phe  
                                     115                                      120                                      125  
 Lys Trp Gln Pro Gly Glu Glu Pro Ala Gly Ser Val Val Gln Asp Ser  
                                     130                                      135                                      140  
 Arg Leu Asp Thr Ile Phe Phe Ala Lys Gln Val Ile Asn Asn Ala Cys  
 145                                      150                                      155                                      160  
 Ala Thr Gln Ala Ile Val Ser Val Leu Leu Asn Cys Thr His Gln Asp  
                                     165                                      170                                      175  
 Val His Leu Gly Glu Thr Leu Ser Glu Phe Lys Glu Phe Ser Gln Ser  
                                     180                                      185                                      190  
 Phe Asp Ala Ala Met Lys Gly Leu Ala Leu Ser Asn Ser Asp Val Ile  
                                     195                                      200                                      205  
 Arg Gln Val His Asn Ser Phe Ala Arg Gln Gln Met Phe Glu Phe Asp  
                                     210                                      215                                      220  
 Thr Xaa Thr Ser Ala Lys Glu Glu Asp Ala Phe His Phe Val Ser Tyr  
 225                                      230                                      235                                      240  
 Val Pro Val Asn Gly Arg Leu Tyr Glu Leu Asp Gly Leu Arg Glu Gly  
                                     245                                      250                                      255  
 Pro Ile Asp Leu Gly Ala Cys Asn Gln Asp Asp Trp Phe Ser Ala Val  
                                     260                                      265                                      270  
 Arg Pro Val Ile Glu Lys Arg Ile Gln Lys Tyr Ser Glu Gly Glu Ile  
                                     275                                      280                                      285  
 Arg Phe Asn Leu Met Ala Ile Val Ser Asp Arg Lys Met Ile Tyr Glu  
                                     290                                      295                                      300  
 Gln Lys Ile Ala Glu Leu Gln Arg Gln Leu Ala Glu Glu Pro Met Asp  
 305                                      310                                      315                                      320  
 Thr Asp Gln Gly Asn Ser Met Leu Ser Ala Ile Gln Ser Glu Val Ala

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<400> 1510
Arg Gly Gln Val Pro Ser Ser Ser Leu Ala His Gly Cys Val Arg Pro
 1          5          10         15
Gly Glu Pro Ser Trp Pro Gly Glu Pro Ser Trp Pro Ala Arg Val Leu
    20          25          30
Arg Arg Arg Gln Val Leu Tyr Pro Arg Phe Gln Ser Arg Gly Pro Gln
   35          40          45
Gly Val Glu Asp Gly Asp Arg Pro Gln Pro Ser Ser Lys Thr Pro Arg
   50          55          60
Ile Pro Lys Ile Tyr Thr Lys Thr Gly Asp Lys Gly Phe Ser Ser Thr
 65          70          75          80
Phe Thr Gly Glu Arg Arg Pro Lys Asp Asp Gln Val Phe Glu Ala Val
      85          90          95
Gly Thr Thr Asp Glu Leu Ser Ser Ala Ile Gly Phe Ala Leu Glu Leu
    100        105        110
Val Thr Glu Lys Gly His Thr Phe Ala Glu Glu Leu Gln Lys Ile Gln
    115        120        125
```

Cys Thr Leu Gln Asp Val Gly Ser Ala Leu Ala Thr Pro Cys Ser Ser  
 130 135 140  
 Ala Arg Glu Ala His Leu Lys Tyr Thr Thr Phe Lys Ala Gly Pro Ile  
 145 150 155 160  
 Leu Glu Leu Glu Gln Trp Ile Asp Lys Tyr Thr Ser Gln Leu Pro Pro  
 165 170 175  
 Leu Thr Ala Phe Ile Leu Pro Ser Gly Gly Lys Ile Ser Ser Ala Leu  
 180 185 190  
 His Phe Cys Arg Ala Val Cys Arg Arg Ala Glu Arg Arg Val Val Pro  
 195 200 205  
 Leu Val Gln Met Gly Glu Thr Asp Ala Asn Val Ala Lys Phe Leu Asn  
 210 215 220  
 Arg Leu Ser Asp Tyr Leu Phe Thr Leu Ala Arg Tyr Ala Ala Met Lys  
 225 230 235 240  
 Glu Gly Asn Gln Glu Lys Ile Tyr Xaa Lys Asn Asp Pro Ser Ala Glu  
 245 250 255  
 Ser Glu Gly Leu  
 260

&lt;210&gt; 1511

&lt;211&gt; 288

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (162)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1511

Gln His Phe His Phe Arg Lys Pro Thr Asp Val Leu Gln Thr Val Lys  
 1 5 10 15  
 Leu Leu Asp Leu Ser Ser Asn Gln Leu Ile Asp Glu Asn Gln Leu Tyr  
 20 25 30  
 Leu Ile Ala His Leu Pro Arg Leu Glu Gln Leu Ile Leu Ser Asp Thr  
 35 40 45  
 Gly Ile Ser Ser Leu His Phe Pro Asp Ala Gly Ile Gly Cys Lys Thr  
 50 55 60

Ser Met Phe Pro Ser Leu Lys Tyr Leu Val Val Asn Asp Asn Gln Ile  
65 70 75 80

Ser Gln Trp Ser Phe Phe Asn Glu Leu Glu Lys Leu Pro Ser Leu Arg  
85 90 95

Ala Leu Ser Cys Leu Arg Asn Pro Leu Thr Lys Glu Asp Lys Glu Ala  
100 105 110

Glu Thr Ala Arg Leu Leu Ile Ile Ala Ser Ile Gly Gln Leu Lys Thr  
115 120 125

Leu Asn Lys Cys Glu Ile Leu Pro Glu Glu Arg Arg Arg Ala Glu Leu  
130 135 140

Asp Tyr Arg Lys Ala Phe Gly Asn Glu Trp Lys Gln Ala Gly Gly His  
145 150 155 160

Lys Xaa Pro Glu Lys Asn Arg Leu Ser Glu Glu Phe Leu Thr Ala His  
165 170 175

Pro Arg Tyr Gln Phe Leu Cys Leu Lys Tyr Gly Ala Pro Glu Asp Trp  
180 185 190

Glu Leu Lys Thr Gln Gln Pro Leu Met Leu Lys Asn Gln Leu Leu Thr  
195 200 205

Leu Lys Ile Lys Tyr Pro His Gln Leu Asp Gln Lys Val Leu Glu Lys  
210 215 220

Gln Leu Pro Gly Ser Met Thr Ile Gln Lys Val Lys Gly Leu Leu Ser  
225 230 235 240

Arg Leu Leu Lys Val Pro Val Ser Asp Leu Leu Leu Ser Tyr Glu Ser  
245 250 255

Pro Lys Lys Pro Gly Arg Glu Ile Glu Leu Glu Asn Asp Leu Lys Ser  
260 265 270

Leu Gln Phe Tyr Ser Val Glu Asn Gly Asp Cys Leu Leu Val Arg Trp  
275 280 285

&lt;210&gt; 1512

&lt;211&gt; 123

&lt;212&gt; PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (73)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1512

Lys Cys Pro Arg Glu Pro Leu Val His Arg Arg Phe Val Ser Thr Leu  
1 5 10 15

Pro Ile Phe Thr Ala Leu Ala Leu Gln Ala Trp Gly Ser Ile Cys Ser  
20 25 30

Ser His Val Lys Ser Gly Pro Ala Phe Leu Asn Ser Val Gln Ala Asp  
35 40 45

Leu Phe Ser Cys Thr Gly Ile Ser Tyr Gln Pro Asn Ile Cys Ile Glu  
50 55 60

Gln Arg Gly Leu Cys Ala Pro Pro Xaa Met Ala Ala Met Met Ala Ala  
65 70 75 80

Val Ile His Ala His Leu Gln Thr Ser Gln Ser Gly Ser Glu Met Ser  
85 90 95

Thr Asn Ile Cys Gly Arg Lys Gly Tyr Thr Asp His Pro Val Val Leu  
100 105 110

Gln Leu Tyr Arg Ala Arg Lys Gly Cys Gly Lys  
115 120

<210> 1513

<211> 108

<212> PRT

<213> Homo sapiens

<400> 1513

Ala Asp Gly Gly Trp Gly Glu Asp Phe Glu Ser Cys Glu Glu Arg Arg  
1 5 10 15

Tyr Val Gln Ser Ala Gln Ser Gln Ile His Asn Thr Cys Trp Ala Met  
20 25 30

Met Gly Leu Met Ala Val Arg His Pro Asp Ile Glu Ala Gln Glu Arg  
35 40 45

Gly Val Arg Cys Leu Leu Glu Lys Gln Leu Pro Asn Gly Asp Trp Pro  
50 55 60

Gln Glu Asn Ile Ala Gly Val Phe Asn Lys Ser Cys Ala Ile Ser Tyr  
65 70 75 80

Thr Ser Tyr Arg Asn Ile Phe Pro Ile Trp Ala Leu Gly Arg Phe Ser  
85 90 95

Gln Leu Tyr Pro Glu Arg Ala Leu Ala Gly His Pro  
100 105

<210> 1514

<211> 33

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (3)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1514

Ser Trp Xaa Ser Thr Ala Val Ala Ala Ala Leu Glu Leu Val Asp Pro  
1 5 10 15

Pro Gly Cys Arg Asn Ser Ala Arg Val Ser Leu Phe Val Cys Phe Phe  
20 25 30

Leu

<210> 1515

<211> 479

<212> PRT

<213> Homo sapiens

<400> 1515

Gly Thr Arg Arg Pro Ser Ser Ser Val Arg Ser Gly Ser Trp Ser Arg  
1 5 10 15

Leu Pro Gly Tyr Arg Gly Ala Ser Met Thr Thr Met Ala Ala Ala Thr  
20 25 30

Leu Leu Arg Ala Thr Pro His Phe Ser Gly Leu Ala Ala Gly Arg Thr  
35 40 45

Phe Leu Leu Gln Gly Leu Leu Arg Leu Leu Lys Ala Pro Ala Leu Pro  
50 55 60



Leu Leu Cys Arg Gly Leu Ala Val Glu Ala Lys Lys Thr Tyr Val Arg  
65 70 75 80

Asp Lys Pro His Val Asn Val Gly Thr Ile Gly His Val Asp His Gly  
85 90 95

Lys Thr Thr Leu Thr Ala Ala Ile Thr Lys Ile Leu Ala Glu Gly Gly  
100 105 110

Gly Ala Lys Phe Lys Lys Tyr Glu Glu Ile Asp Asn Ala Pro Glu Glu  
115 120 125

Arg Ala Arg Gly Ile Thr Ile Asn Ala Ala His Val Glu Tyr Ser Thr  
130 135 140

Ala Ala Arg His Tyr Ala His Thr Asp Cys Pro Gly His Ala Asp Tyr  
145 150 155 160

Val Lys Asn Met Ile Thr Gly Thr Ala Pro Leu Asp Gly Cys Ile Leu  
165 170 175

Val Val Ala Ala Asn Asp Gly Pro Met Pro Gln Thr Arg Glu His Leu  
180 185 190

Leu Leu Ala Arg Gln Ile Gly Val Glu His Val Val Val Tyr Val Asn  
195 200 205

Lys Ala Asp Ala Val Gln Asp Ser Glu Met Val Glu Leu Val Glu Leu  
210 215 220

Glu Ile Arg Glu Leu Leu Thr Glu Phe Gly Tyr Lys Gly Glu Glu Thr  
225 230 235 240

Pro Val Ile Val Gly Ser Ala Leu Cys Ala Leu Glu Gly Arg Asp Pro  
245 250 255

Glu Leu Gly Leu Lys Ser Val Gln Lys Leu Leu Asp Ala Val Asp Thr  
260 265 270

Tyr Ile Pro Val Pro Ala Arg Asp Leu Glu Lys Pro Phe Leu Leu Pro  
275 280 285

Val Glu Ala Val Tyr Ser Val Pro Gly Arg Gly Thr Val Val Thr Gly  
290 295 300

Thr Leu Glu Arg Gly Ile Leu Lys Lys Gly Asp Glu Cys Glu Leu Leu  
305 310 315 320

Gly His Ser Lys Asn Ile Arg Thr Val Val Thr Gly Ile Glu Met Phe  
325 330 335

His Lys Ser Leu Glu Arg Ala Glu Ala Gly Asp Asn Leu Gly Ala Leu  
                   340                                  345                                  350  
 Val Arg Gly Leu Lys Arg Glu Asp Leu Arg Arg Gly Leu Val Met Val  
                   355                                  360                                  365  
 Lys Pro Gly Ser Ile Lys Pro His Gln Lys Val Glu Ala Gln Val Tyr  
                   370                                  375                                  380  
 Ile Leu Ser Lys Glu Glu Gly Gly Arg His Lys Pro Phe Val Ser His  
 385                                  390                                  395                                  400  
 Phe Met Pro Val Met Phe Ser Leu Thr Trp Asp Met Ala Cys Arg Ile  
                                   405                                  410                                  415  
 Ile Leu Pro Pro Glu Lys Glu Leu Ala Met Pro Gly Glu Asp Leu Lys  
                                   420                                  425                                  430  
 Phe Asn Leu Ile Leu Arg Gln Pro Met Ile Leu Glu Lys Gly Gln Arg  
                   435                                  440                                  445  
 Phe Thr Leu Arg Asp Gly Asn Arg Thr Ile Gly Thr Gly Leu Val Thr  
                   450                                  455                                  460  
 Asn Thr Leu Ala Met Thr Glu Glu Glu Lys Asn Ile Lys Trp Gly  
 465                                  470                                  475

&lt;210&gt; 1516

&lt;211&gt; 627

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1516

Arg Gln Glu Leu Ile Trp Pro Leu Cys Ser Pro Pro Gln Gly Asp Arg  
   1                                  5                                  10                                  15  
 Phe Leu Gln Lys Ser Trp Ile Phe Phe Arg Pro Val Met Ala Asp Lys  
                   20                                  25                                  30  
 Leu Thr Arg Ile Ala Ile Val Asn His Asp Lys Cys Lys Pro Lys Lys  
                   35                                  40                                  45  
 Cys Arg Gln Glu Cys Lys Lys Ser Cys Pro Val Val Arg Met Gly Lys  
                   50                                  55                                  60  
 Leu Cys Ile Glu Val Thr Pro Gln Ser Lys Ile Ala Trp Ile Ser Glu  
   65                                  70                                  75                                  80

Thr Leu Cys Ile Gly Cys Gly Ile Cys Ile Lys Lys Cys Pro Phe Gly  
 85 90 95  
 Ala Leu Ser Ile Val Asn Leu Pro Ser Asn Leu Glu Lys Glu Thr Thr  
 100 105 110  
 His Arg Tyr Cys Ala Asn Ala Phe Lys Leu His Arg Leu Pro Ile Pro  
 115 120 125  
 Arg Pro Gly Glu Val Leu Gly Leu Val Gly Thr Asn Gly Ile Gly Lys  
 130 135 140  
 Ser Thr Ala Leu Lys Ile Leu Ala Gly Lys Gln Lys Pro Asn Leu Gly  
 145 150 155 160  
 Lys Tyr Asp Asp Pro Pro Asp Trp Gln Glu Ile Leu Thr Tyr Phe Arg  
 165 170 175  
 Gly Ser Glu Leu Gln Asn Tyr Phe Thr Lys Ile Leu Glu Asp Asp Leu  
 180 185 190  
 Lys Ala Ile Ile Lys Pro Gln Tyr Val Asp Gln Ile Pro Lys Ala Ala  
 195 200 205  
 Lys Gly Thr Val Gly Ser Ile Leu Asp Arg Lys Asp Glu Thr Lys Thr  
 210 215 220  
 Gln Ala Ile Val Cys Gln Gln Leu Asp Leu Thr His Leu Lys Glu Arg  
 225 230 235 240  
 Asn Val Glu Asp Leu Ser Gly Gly Glu Leu Gln Arg Phe Ala Cys Ala  
 245 250 255  
 Val Val Cys Ile Gln Lys Ala Asp Ile Phe Met Phe Asp Glu Pro Ser  
 260 265 270  
 Ser Tyr Leu Asp Val Lys Gln Arg Leu Lys Ala Ala Ile Thr Ile Arg  
 275 280 285  
 Ser Leu Ile Asn Pro Asp Arg Tyr Ile Ile Val Val Glu His Asp Leu  
 290 295 300  
 Ser Val Leu Asp Tyr Leu Ser Asp Phe Ile Cys Cys Leu Tyr Gly Val  
 305 310 315 320  
 Pro Ser Ala Tyr Gly Val Val Thr Met Pro Phe Ser Val Arg Glu Gly  
 325 330 335  
 Ile Asn Ile Phe Leu Asp Gly Tyr Val Pro Thr Glu Asn Leu Arg Phe  
 340 345 350

Arg Asp Ala Ser Leu Val Phe Lys Val Ala Glu Thr Ala Asn Glu Glu  
355 360 365

Glu Val Lys Lys Met Cys Met Tyr Lys Tyr Pro Gly Met Lys Lys Lys  
370 375 380

Met Gly Glu Phe Glu Leu Ala Ile Val Ala Gly Glu Phe Thr Asp Ser  
385 390 395 400

Glu Ile Met Val Met Leu Gly Glu Asn Gly Thr Gly Lys Thr Thr Phe  
405 410 415

Ile Arg Met Leu Ala Gly Arg Leu Lys Pro Asp Glu Gly Gly Glu Val  
420 425 430

Pro Val Leu Asn Val Ser Tyr Lys Pro Gln Lys Ile Ser Pro Lys Ser  
435 440 445

Thr Gly Ser Val Arg Gln Leu Leu His Glu Lys Ile Arg Asp Ala Tyr  
450 455 460

Thr His Pro Gln Phe Val Thr Asp Val Met Lys Pro Leu Gln Ile Glu  
465 470 475 480

Asn Ile Ile Asp Gln Glu Val Gln Thr Leu Ser Gly Gly Glu Leu Gln  
485 490 495

Arg Val Ala Leu Ala Leu Cys Leu Gly Lys Pro Ala Asp Val Tyr Leu  
500 505 510

Ile Asp Glu Pro Ser Ala Tyr Leu Asp Ser Glu Gln Arg Leu Met Ala  
515 520 525

Ala Arg Val Val Lys Arg Phe Ile Leu His Ala Lys Lys Thr Ala Phe  
530 535 540

Val Val Glu His Asp Phe Ile Met Ala Thr Tyr Leu Ala Asp Arg Val  
545 550 555 560

Ile Val Phe Asp Gly Val Pro Ser Lys Asn Thr Val Ala Asn Ser Pro  
565 570 575

Gln Thr Leu Leu Ala Gly Met Asn Lys Phe Leu Ser Gln Leu Glu Ile  
580 585 590

Thr Phe Arg Arg Asp Pro Asn Asn Tyr Arg Pro Arg Ile Asn Lys Leu  
595 600 605

Asn Ser Ile Lys Asp Val Glu Gln Lys Lys Ser Gly Asn Tyr Phe Phe  
610 615 620

Leu Asp Asp  
625

<210> 1517

<211> 104

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (93)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (94)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1517

Ala Pro Gln Pro Pro Pro Thr Gly Gln Ser Asp Tyr Thr Lys Ala Trp  
1 5 10 15

Glu Glu Tyr Tyr Lys Lys Ile Gly Gln Gln Pro Gln Gln Pro Gly Ala  
20 25 30

Pro Pro Gln Gln Asp Tyr Thr Lys Ala Trp Glu Glu Tyr Tyr Lys Lys  
35 40 45

Gln Ala Gln Val Ala Thr Gly Gly Val Gln Glu Leu Pro Gln Ala Pro  
50 55 60

Ser Gln Thr Thr Val Pro Pro Gly Glu Tyr Tyr Arg Gln Gln Ala Ala  
65 70 75 80

Tyr Tyr Gly Gln Thr Pro Gly Pro Gly Gly Pro Gln Xaa Xaa Pro Thr  
85 90 95

Gln Gln Gly Gln Gln Gln Ala Gln  
100

<210> 1518

<211> 149

<212> PRT

<213> Homo sapiens

<400> 1518

His Met Thr Thr Val Ser Pro Asp Cys Val Glu Cys Met Ala Cys Ser

1                    5                    10                    15  
 Asp Asn Thr Val Arg Ala Gly Leu Thr Pro Lys Phe Ile Asp Val Pro  
                   20                    25                    30  
 Thr Leu Cys Glu Met Leu Ser Tyr Thr Pro Ser Ser Ser Lys Asp Arg  
                   35                    40                    45  
 Leu Phe Leu Pro Thr Arg Ser Gln Glu Asp Pro Tyr Leu Ser Ile Tyr  
                   50                    55                    60  
 Asp Pro Pro Val Pro Asp Phe Thr Ile Met Lys Thr Glu Val Pro Gly  
                   65                    70                    75                    80  
 Ser Val Thr Glu Tyr Lys Val Leu Ala Leu Asp Ser Ala Ser Ile Leu  
                   85                    90                    95  
 Leu Met Val Gln Gly Thr Val Ile Ala Ser Thr Pro Thr Thr Gln Thr  
                   100                    105                    110  
 Pro Ile Pro Leu Gln Arg Gly Gly Val Leu Phe Ile Gly Ala Asn Glu  
                   115                    120                    125  
 Ser Val Ser Leu Lys Leu Thr Glu Pro Lys Asp Leu Leu Ile Phe Arg  
                   130                    135                    140  
 Ala Cys Cys Leu Leu  
 145

<210> 1519

<211> 616

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (12)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (262)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1519

Ser Trp Gln Val Gln Gly Pro Pro Pro Arg Glu Xaa Cys Pro Ser Cys  
 1                    5                    10                    15

Thr Gln Ser Ala Ile Arg Gly Ser Cys Thr Leu Leu Leu Arg Ala Gly

20	25	30
Glu Asp Ser Ala Asp Gln Gly Arg Gly Gln Gln Gln His Phe His Phe		
35	40	45
His Thr Ser Ile Phe Leu Arg Gly Pro Pro Gly Ser Ser Pro Gln Pro		
50	55	60
Ala Pro Leu Arg Leu Arg Asp Trp Ala Leu Cys Leu Gly Leu His Asn		
65	70	75
Phe Val Ser Pro Asn Trp Leu Ser Arg Thr Tyr Ser Ser His Val Ser		
85	90	95
Trp Ile Thr Gly Gln Ala Met Glu Ile Gly Ser Ala Ala Leu Thr Ile		
100	105	110
Leu Val Glu Cys Trp Asp Gly His Leu Thr Pro Pro Glu Val Ala Ser		
115	120	125
Leu Ala Asp Arg Ala Ser Arg Ala Arg Asp Ser Asn Met Val Arg Ala		
130	135	140
Ala Ala Glu Leu Ala Leu Ser Cys Leu Pro His Ala His Ala Leu Asn		
145	150	155
Pro Asn Glu Ile Gln Arg Ala Leu Val Gln Cys Lys Glu Gln Asp Asn		
165	170	175
Leu Met Leu Glu Lys Ala Cys Met Ala Val Glu Glu Ala Ala Lys Gly		
180	185	190
Gly Gly Val Tyr Pro Glu Val Leu Phe Glu Val Ala His Gln Trp Phe		
195	200	205
Trp Leu Tyr Glu Gln Thr Ala Gly Gly Ser Ser Thr Ala Arg Glu Gly		
210	215	220
Ala Thr Ser Cys Ser Ala Ser Gly Ile Arg Ala Gly Gly Glu Ala Gly		
225	230	235
Arg Gly Met Pro Glu Gly Arg Gly Gly Pro Gly Thr Glu Pro Val Thr		
245	250	255
Val Ala Ala Ala Gln Xaa Thr Ala Ala Ala Thr Val Val Pro Val Ile		
260	265	270
Ser Val Gly Ser Ser Leu Tyr Pro Gly Pro Gly Leu Gly His Gly His		
275	280	285
Ser Pro Gly Leu His Pro Tyr Thr Ala Leu Gln Pro His Leu Pro Cys		

290		295		300
Ser Pro Gln Tyr Leu Thr His Pro Ala His Pro Ala His Pro Met Pro				
305		310		315 320
His Met Pro Arg Pro Ala Val Phe Pro Val Pro Ser Ser Ala Tyr Pro				
	325		330	335
Gln Gly Val His Pro Ala Phe Leu Gly Ala Gln Tyr Pro Tyr Ser Val				
	340		345	350
Thr Pro Pro Ser Leu Ala Ala Thr Ala Val Ser Phe Pro Val Pro Ser				
	355		360	365
Met Ala Pro Ile Thr Val His Pro Tyr His Thr Glu Pro Gly Leu Pro				
	370		375	380
Leu Pro Thr Ser Val Ala Leu Ser Ser Val His Pro Ala Ser Thr Phe				
	385		390	395 400
Pro Ala Ile Gln Gly Ala Ser Leu Pro Ala Leu Thr Thr Gln Pro Ser				
	405		410	415
Pro Leu Val Ser Gly Gly Phe Pro Pro Pro Glu Glu Glu Thr His Ser				
	420		425	430
Gln Pro Val Asn Pro His Ser Leu His His Leu His Ala Ala Tyr Arg				
	435		440	445
Val Gly Met Leu Ala Leu Glu Met Leu Gly Arg Arg Ala His Asn Asp				
	450		455	460
His Pro Asn Asn Phe Ser Arg Ser Pro Pro Tyr Thr Asp Asp Val Lys				
	465		470	475 480
Trp Leu Leu Gly Leu Ala Ala Lys Leu Gly Val Asn Tyr Val His Gln				
	485		490	495
Phe Cys Val Gly Ala Ala Lys Gly Val Leu Ser Pro Phe Val Leu Gln				
	500		505	510
Glu Ile Val Met Glu Thr Leu Gln Arg Leu Ser Pro Ala His Ala His				
	515		520	525
Asn His Leu Arg Ala Pro Ala Phe His Gln Leu Val Gln Arg Cys Gln				
	530		535	540
Gln Ala Tyr Met Gln Tyr Ile His His Arg Leu Ile His Leu Thr Pro				
	545		550	555 560
Ala Asp Tyr Asp Asp Phe Val Asn Ala Ile Arg Ser Ala Arg Ser Ala				



565

570

575

Phe Cys Leu Thr Pro Met Gly Met Met Gln Phe Asn Asp Ile Leu Gln  
 580 585 590

Asn Leu Lys Arg Ser Lys Gln Thr Lys Glu Leu Trp Gln Arg Val Ser  
 595 600 605

Leu Glu Met Ala Thr Phe Ser Pro  
 610 615

&lt;210&gt; 1520

&lt;211&gt; 159

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1520

Glu Gly Ser Arg Pro Pro Leu Cys Arg Ser Cys Ile Ser Ala Glu Ser  
 1 5 10 15

Val Phe Gln Pro Gln Leu Val Ala Pro Leu Ala Pro Leu Leu Pro Asp  
 20 25 30

Gly His Val Phe Val Thr Leu Glu Asn Lys Gln Pro His Thr His Phe  
 35 40 45

Phe Phe Ser Phe Lys Thr Val Thr Trp Lys Tyr Glu Lys Ala Arg Arg  
 50 55 60

Arg Ser Lys Gly Cys Phe Leu Glu Trp Leu Arg Cys Cys Pro Ala Val  
 65 70 75 80

Val Ile Val Phe Ser Thr Gly Leu Phe Pro Phe Ile Ser Cys Gly Thr  
 85 90 95

Glu Ser Leu Leu Pro Pro Leu Leu Gly Ser Pro Gly Gly Pro Trp Pro  
 100 105 110

Pro Phe Arg Leu Ser Lys Lys Pro Thr Thr Leu Glu Ile Phe Phe Leu  
 115 120 125

Glu Phe Arg Cys Phe Leu Leu Leu Pro Leu Asp Lys Lys Gln Leu Lys  
 130 135 140

Arg Pro Tyr Leu Arg Asp Glu Lys Asn Met His Ile Asn Ser Ile  
 145 150 155

<210> 1521  
<211> 129  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (12)  
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1521  
Glu Trp Ala Glu Cys Arg Gly Gln Leu Val Gln Xaa Ser Arg Pro Glu  
1 5 10 15  
Val Ser Ala Gly Ser Leu Leu Leu Pro Ala Pro Gln Ala Glu Asp His  
20 25 30  
Ser Ser Arg Ile Leu Tyr Pro Arg Pro Lys Ser Leu Leu Pro Lys Met  
35 40 45  
Met Asn Ala Asp Met Asp Ala Val Asp Ala Glu Asn Gln Val Glu Leu  
50 55 60  
Glu Glu Lys Thr Arg Leu Ile Asn Gln Val Leu Glu Leu Gln His Thr  
65 70 75 80  
Leu Glu Asp Leu Ser Ala Arg Val Asp Ala Val Lys Glu Glu Asn Leu  
85 90 95  
Lys Leu Lys Ser Glu Asn Gln Val Leu Gly Gln Tyr Ile Glu Asn Leu  
100 105 110  
Met Ser Ala Ser Ser Val Phe Gln Thr Thr Asp Thr Lys Ser Lys Arg  
115 120 125

Lys

<210> 1522  
<211> 109  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (58)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (70)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (80)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1522

Ala Gly Thr Glu Pro Gly Val Lys Cys Ser Ala Lys Val His Asp Pro  
1 5 10 15

Leu Arg Ser His Trp Ala Asp Leu Thr Ser Asp Ser Leu Val Val Gln  
20 25 30

Met Pro Cys Ala Ala Phe Pro Glu Ala Ile Gly Gly Leu Pro Ala Ala  
35 40 45

Glu Ile Tyr Ala Gly His Pro Leu Asn Xaa Cys His Ser Lys Gly Gly  
50 55 60

Pro Arg Cys Ser Ser Xaa Ser Phe Thr Cys Gly Gly Val Gly Glu Xaa  
65 70 75 80

Ala Val Ser Glu Met Gln Val Pro Arg Ser His Pro Gly Leu Leu Lys  
85 90 95

Gly Cys Gly Ile Cys Val Ser Asp Ala Tyr Tyr Asn Met  
100 105

<210> 1523

<211> 53

<212> PRT

<213> Homo sapiens

<400> 1523

Gly Thr Ser Ser Cys Leu Ser Leu Pro Glu Tyr Trp Asp Tyr Arg Leu  
1 5 10 15

Phe Leu Phe Lys His Lys Ser Phe Lys Leu Val Leu Thr Leu Tyr Ser  
20 25 30

Ala Leu Asp Cys Phe Ser Phe Cys Ser Val Ile Met Ser Leu Val Gly  
35 40 45

Asp Ile Leu His Arg  
50

<210> 1524  
<211> 111  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (107)  
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1524  
Ile Leu Asn Val Lys Ile Ile Asp Leu Asp Ile Glu Ser Ile Ser Asp  
1 5 10 15  
Ser Arg Asp Thr Pro Ile Cys Leu Lys Gln Pro Lys Met Tyr Trp Leu  
20 25 30  
Trp Asn His Val Leu Asp Arg Phe Leu Arg Pro Val Ser Ser Asn Leu  
35 40 45  
Asp Thr Val Phe Lys Gly Gly Leu Leu Thr Cys Thr Val Gly Gln Ile  
50 55 60  
Ile Gln Ile Tyr Leu Arg Leu Gly Lys Lys Val Ile Cys Asp Phe Ala  
65 70 75 80  
Gly Arg Ala Phe Ala Lys Trp Ser Thr Gly Ser Lys Arg Val Phe Leu  
85 90 95  
Glu Arg Ala Ile Leu Ser Asn Glu Val Ser Xaa Arg Thr Leu Gly  
100 105 110

<210> 1525  
<211> 253  
<212> PRT  
<213> Homo sapiens

<400> 1525  
Leu Ser Gln Arg Gln Asp Gln Val Pro Arg Leu Pro Val Gln Lys Ser  
1 5 10 15  
Arg Gln Glu Ser Pro Arg Ala Glu Glu Asn Pro Lys Trp Arg Glu Gly  
20 25 30  
Lys Lys Glu Thr Ser Glu Ser Ser Val Gln Lys Ala Gly Arg Ala Ala  
35 40 45

Ala Ala Gln Ala Gly Ala Ala Ala Ser Arg Val Pro Gly Leu Ser Gly  
 50 55 60  
 Ser Asn Leu Ala Pro Cys Asn Lys Gly Arg Leu Ser Ala Arg Glu Asp  
 65 70 75 80  
 Val Ser Asn Ser Lys Met Gln Ala Gln Gln Tyr Gln Gln Gln Arg Arg  
 85 90 95  
 Lys Phe Ala Ala Ala Phe Leu Ala Phe Ile Phe Ile Leu Ala Ala Val  
 100 105 110  
 Asp Thr Ala Glu Ala Gly Lys Lys Glu Lys Pro Glu Lys Lys Val Lys  
 115 120 125  
 Lys Ser Asp Cys Gly Glu Trp Gln Trp Ser Val Cys Val Pro Thr Ser  
 130 135 140  
 Gly Asp Cys Gly Leu Gly Thr Arg Glu Gly Thr Arg Thr Gly Ala Glu  
 145 150 155 160  
 Cys Lys Gln Thr Met Lys Thr Gln Arg Cys Lys Ile Pro Cys Asn Trp  
 165 170 175  
 Lys Lys Gln Phe Gly Ala Glu Cys Lys Tyr Gln Phe Gln Ala Trp Gly  
 180 185 190  
 Glu Cys Asp Leu Asn Thr Ala Leu Lys Thr Arg Thr Gly Ser Leu Lys  
 195 200 205  
 Arg Ala Leu His Asn Ala Glu Cys Gln Lys Thr Val Thr Ile Ser Lys  
 210 215 220  
 Pro Cys Gly Lys Leu Thr Lys Pro Lys Pro Gln Ala Glu Ser Lys Lys  
 225 230 235 240  
 Lys Lys Lys Glu Gly Lys Lys Gln Glu Lys Met Leu Asp  
 245 250

<210> 1526

<211> 93

<212> PRT

<213> Homo sapiens

<400> 1526

Pro Cys Thr Lys Arg Asn Gly Asp Cys Leu Tyr Pro Pro Arg Phe Ile  
 1 5 10 15

Ser Trp Pro Glu Val Ile Leu Ala Ser Arg Lys Gly Cys Thr Ser Ser

20 25 30  
His His Gln Leu Gln Arg Met Ala Ala Ile Tyr Leu Ser Arg Gly Phe  
35 40 45  
Phe Ser Arg Glu Pro Ile Cys Pro Phe Glu Glu Lys Thr Lys Val Glu  
50 55 60  
Arg Met Val Glu Asp Tyr Leu Ala Ser Gly Tyr Gln Val Ser Arg Lys  
65 70 75 80  
Arg Thr Val Val Lys Asn Asp Met Leu Ser Ser Asn Arg  
85 90

<210> 1527  
<211> 276  
<212> PRT  
<213> Homo sapiens

<400> 1527  
Phe Phe Ile Asp His Asn Thr Lys Thr Thr Thr Trp Glu Asp Pro Arg  
1 5 10 15  
Leu Lys Phe Pro Val His Met Arg Ser Lys Thr Ser Leu Asn Pro Asn  
20 25 30  
Asp Leu Gly Pro Leu Pro Pro Gly Trp Glu Glu Arg Ile His Leu Asp  
35 40 45  
Gly Arg Thr Phe Tyr Ile Asp His Asn Ser Lys Ile Thr Gln Trp Glu  
50 55 60  
Asp Pro Arg Leu Gln Asn Pro Ala Ile Thr Gly Pro Ala Val Pro Tyr  
65 70 75 80  
Ser Arg Glu Phe Lys Gln Lys Tyr Asp Tyr Phe Arg Lys Lys Leu Lys  
85 90 95  
Lys Pro Ala Asp Ile Pro Asn Arg Phe Glu Met Lys Leu His Arg Asn  
100 105 110  
Asn Ile Phe Glu Glu Ser Tyr Arg Arg Ile Met Ser Val Lys Arg Pro  
115 120 125  
Asp Val Leu Lys Ala Arg Leu Trp Ile Glu Phe Glu Ser Glu Lys Gly  
130 135 140  
Leu Asp Tyr Gly Gly Val Ala Arg Glu Trp Phe Phe Leu Leu Ser Lys  
145 150 155 160

Glu Met Phe Asn Pro Tyr Tyr Gly Leu Phe Glu Tyr Ser Ala Thr Asp  
                     165                    170                    175  
 Asn Tyr Thr Leu Gln Ile Asn Pro Asn Ser Gly Leu Cys Asn Glu Asp  
                     180                    185                    190  
 His Leu Ser Tyr Phe Thr Phe Ile Gly Arg Val Ala Gly Leu Ala Val  
                     195                    200                    205  
 Phe His Gly Lys Leu Leu Asp Gly Phe Phe Ile Arg Pro Phe Tyr Lys  
                     210                    215                    220  
 Met Met Leu Gly Lys Gln Ile Thr Leu Asn Asp Met Glu Ser Val Asp  
 225                    230                    235                    240  
 Ser Glu Tyr Tyr Asn Ser Leu Lys Trp Ile Leu Glu Asn Asp Pro Thr  
                     245                    250                    255  
 Glu Leu Asp Leu Met Phe Cys Ile Asp Glu Glu Asn Phe Gly Gln Thr  
                     260                    265                    270  
 Ser Thr Gly Arg  
                     275

<210> 1528  
 <211> 307  
 <212> PRT  
 <213> Homo sapiens

<400> 1528  
 Val Met Asp Leu Val Leu Arg Val Ala Asp Tyr Tyr Phe Phe Thr Pro  
   1                    5                    10                    15  
 Tyr Val Tyr Pro Ala Thr Trp Pro Glu Asp Asp Ile Phe Arg Gln Ala  
                     20                    25                    30  
 Ile Ser Leu Leu Ile Val Thr Asn Val Gly Ala Tyr Ile Leu Tyr Phe  
                     35                    40                    45  
 Phe Cys Ala Thr Leu Ser Tyr Tyr Phe Val Phe Asp His Ala Leu Met  
                     50                    55                    60  
 Lys His Pro Gln Phe Leu Lys Asn Gln Val Arg Arg Glu Ile Lys Phe  
   65                    70                    75                    80  
 Thr Val Gln Ala Leu Pro Trp Ile Ser Ile Leu Thr Val Ala Leu Phe  
                     85                    90                    95

Leu Leu Glu Ile Arg Gly Tyr Ser Lys Leu His Asp Asp Leu Gly Glu  
 100 105 110  
 Phe Pro Tyr Gly Leu Phe Glu Leu Val Val Ser Ile Ile Ser Phe Leu  
 115 120 125  
 Phe Phe Thr Asp Met Phe Ile Tyr Trp Ile His Arg Gly Leu His His  
 130 135 140  
 Arg Leu Val Tyr Lys Arg Leu His Lys Pro His His Ile Trp Lys Ile  
 145 150 155 160  
 Pro Thr Pro Phe Ala Ser His Ala Phe His Pro Ile Asp Gly Phe Leu  
 165 170 175  
 Gln Ser Leu Pro Tyr His Ile Tyr Pro Phe Ile Phe Pro Leu His Lys  
 180 185 190  
 Val Val Tyr Leu Ser Leu Tyr Ile Leu Val Asn Ile Trp Thr Ile Ser  
 195 200 205  
 Ile His Asp Gly Asp Phe Arg Val Pro Gln Ile Leu Gln Pro Phe Ile  
 210 215 220  
 Asn Gly Ser Ala His His Thr Asp His His Met Phe Phe Asp Tyr Asn  
 225 230 235 240  
 Tyr Gly Gln Tyr Phe Thr Leu Trp Asp Arg Ile Gly Gly Ser Phe Lys  
 245 250 255  
 Asn Pro Ser Ser Phe Glu Gly Lys Gly Pro Leu Ser Tyr Val Lys Glu  
 260 265 270  
 Met Thr Glu Gly Lys Arg Thr Ala Ile Gln Glu Met Ala Val Arg Met  
 275 280 285  
 Lys Asn Tyr Ser Met Glu Ser Leu Gln Arg Leu Asn Arg Leu Leu Pro  
 290 295 300  
 Ser Tyr Ser  
 305

&lt;210&gt; 1529

&lt;211&gt; 233

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1529

Thr Pro Tyr Ala Ser Leu Pro Met Gln Thr Ile Gln Glu Asn Lys Pro



1 5 10 15  
Ala Thr Phe Ser Ser Met Ser His Tyr Gly Asn Gln Thr Leu Gln Asp  
20 25 30  
Leu Leu Thr Ser Asp Ser Leu Ser His Ser Asp Val Met Met Thr Gln  
35 40 45  
Ser Asp Pro Leu Met Ser Gln Ala Ser Thr Ala Val Ser Ala Gln Asn  
50 55 60  
Ser Arg Arg Asn Val Met Leu Arg Asn Asp Pro Met Met Ser Phe Ala  
65 70 75 80  
Ala Gln Pro Asn Gln Gly Ser Leu Val Asn Gln Asn Leu Leu His His  
85 90 95  
Gln His Gln Thr Gln Gly Ala Leu Gly Gly Ser Arg Ala Leu Ser Asn  
100 105 110  
Ser Val Ser Asn Met Gly Leu Ser Glu Ser Ser Ser Leu Gly Ser Ala  
115 120 125  
Lys His Gln Gln Gln Ser Pro Val Ser Gln Ser Met Gln Thr Leu Ser  
130 135 140  
Asp Ser Leu Ser Gly Ser Ser Leu Tyr Ser Thr Ser Ala Asn Leu Pro  
145 150 155 160  
Val Met Gly His Glu Lys Phe Pro Ser Asp Leu Asp Leu Asp Met Phe  
165 170 175  
Asn Gly Ser Leu Glu Cys Asp Met Glu Ser Ile Ile Arg Ser Glu Leu  
180 185 190  
Met Asp Ala Asp Gly Leu Asp Phe Asn Phe Asp Ser Leu Ile Ser Thr  
195 200 205  
Gln Asn Val Val Gly Leu Asn Val Gly Asn Phe Thr Gly Ala Lys Gln  
210 215 220  
Ala Ser Ser Gln Ser Trp Val Pro Gly  
225 230

&lt;210&gt; 1530

&lt;211&gt; 363

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (178)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (179)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1530

Ala	His	Arg	Leu	Leu	Val	His	Arg	Asp	Val	Cys	His	His	Val	Ser	Ser
1				5					10					15	

Glu	Val	Gln	Phe	Gly	His	Ala	Gly	Ala	Cys	Ala	Asn	Gln	Ala	Ser	Glu
			20					25					30		

Thr	Ala	Val	Ala	Lys	Asn	Gln	Ala	Leu	Lys	Glu	Ala	Gly	Val	Phe	Val
		35					40					45			

Pro	Arg	Ser	Phe	Asp	Glu	Leu	Gly	Glu	Ile	Ile	Gln	Ser	Val	Tyr	Glu
	50					55					60				

Asp	Leu	Val	Ala	Asn	Gly	Val	Ile	Val	Pro	Ala	Gln	Glu	Val	Pro	Pro
65					70					75					80

Pro	Thr	Val	Pro	Met	Asp	Tyr	Ser	Trp	Ala	Arg	Glu	Leu	Gly	Leu	Ile
				85					90					95	

Arg	Lys	Pro	Ala	Ser	Phe	Met	Thr	Ser	Ile	Cys	Asp	Glu	Arg	Gly	Gln
		100						105					110		

Glu	Leu	Ile	Tyr	Ala	Gly	Met	Pro	Ile	Thr	Glu	Val	Phe	Lys	Glu	Glu
		115					120					125			

Met	Gly	Ile	Gly	Gly	Val	Leu	Gly	Leu	Leu	Trp	Phe	Gln	Lys	Arg	Leu
130						135					140				

Pro	Lys	Tyr	Ser	Cys	Gln	Phe	Ile	Glu	Met	Cys	Leu	Met	Val	Thr	Ala
145					150					155					160

Asp	His	Gly	Pro	Ala	Val	Ser	Gly	Ala	His	Asn	Thr	Ile	Ile	Cys	Ala
			165						170					175	

Arg	Xaa	Xaa	Lys	Asp	Leu	Val	Ser	Ser	Leu	Thr	Ser	Gly	Leu	Leu	Thr
			180					185					190		

Ile	Gly	Asp	Arg	Phe	Gly	Gly	Ala	Leu	Asp	Ala	Ala	Ala	Lys	Met	Phe
		195					200					205			

Ser	Lys	Ala	Phe	Asp	Ser	Gly	Ile	Ile	Pro	Met	Glu	Phe	Val	Asn	Lys
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

210 215 220

Met Lys Lys Glu Gly Lys Leu Ile Met Gly Ile Gly His Arg Val Lys  
225 230 235 240

Ser Ile Asn Asn Pro Asp Met Arg Val Gln Ile Leu Lys Asp Tyr Val  
245 250 255

Arg Gln His Phe Pro Ala Thr Pro Leu Leu Asp Tyr Ala Leu Glu Val  
260 265 270

Glu Lys Ile Thr Thr Ser Lys Lys Pro Asn Leu Ile Leu Asn Val Asp  
275 280 285

Gly Leu Ile Gly Val Ala Phe Val Asp Met Leu Arg Asn Cys Gly Ser  
290 295 300

Phe Thr Arg Glu Glu Ala Asp Glu Tyr Ile Asp Ile Gly Ala Leu Asn  
305 310 315 320

Gly Ile Phe Val Leu Gly Arg Ser Met Gly Phe Ile Gly His Tyr Leu  
325 330 335

Asp Gln Lys Arg Leu Lys Gln Gly Leu Tyr Arg His Pro Trp Asp Asp  
340 345 350

Ile Ser Tyr Val Leu Pro Glu His Met Ser Met  
355 360

<210> 1531

<211> 397

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (179)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (180)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (181)

<223> Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (358)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1531

Ser Val Ser Ala Ser Glu Val Thr Ser Thr Val Tyr Asn Thr Val Ser  
 1 5 10 15

Glu Gly Thr His Phe Leu Glu Thr Ile Glu Thr Pro Arg Pro Gly Lys  
 20 25 30

Leu Phe Pro Lys Asp Val Ser Ser Ser Thr Pro Pro Ser Val Thr Ser  
 35 40 45

Lys Ser Arg Val Ser Arg Leu Ala Gly Arg Lys Thr Asn Glu Ser Val  
 50 55 60

Ser Glu Pro Arg Lys Gly Phe Met Tyr Ser Arg Asn Thr Asn Glu Asn  
 65 70 75 80

Pro Gln Glu Cys Phe Asn Ala Ser Lys Leu Leu Thr Ser His Gly Met  
 85 90 95

Gly Ile Gln Val Pro Leu Asn Ala Thr Glu Phe Asn Tyr Leu Cys Pro  
 100 105 110

Ala Ile Ile Asn Gln Ile Asp Ala Arg Ser Cys Leu Ile His Thr Ser  
 115 120 125

Glu Lys Lys Ala Glu Ile Pro Pro Lys Thr Tyr Ser Leu Gln Ile Ala  
 130 135 140

Trp Val Gly Gly Phe Ile Ala Ile Ser Ile Ile Ser Phe Leu Ser Leu  
 145 150 155 160

Leu Gly Val Ile Leu Val Pro Leu Met Asn Arg Val Phe Phe Lys Phe  
 165 170 175

Leu Leu Xaa Xaa Xaa Val Ala Leu Ala Val Gly Thr Leu Ser Gly Asp  
 180 185 190

Ala Phe Leu His Leu Leu Pro His Ser His Ala Ser His His His Ser  
 195 200 205

His Ser His Glu Glu Pro Ala Met Glu Met Lys Arg Gly Pro Leu Phe  
 210 215 220

Ser His Leu Ser Ser Gln Asn Ile Glu Glu Ser Ala Tyr Phe Asp Ser  
 225 230 235 240

Thr Trp Lys Gly Leu Thr Ala Leu Gly Gly Leu Tyr Phe Met Phe Leu  
245 250 255

Val Glu His Val Leu Thr Leu Ile Lys Gln Phe Lys Asp Lys Lys Lys  
260 265 270

Lys Asn Gln Lys Lys Pro Glu Asn Asp Asp Asp Val Glu Ile Lys Lys  
275 280 285

Gln Leu Ser Lys Tyr Glu Ser Gln Leu Ser Thr Asn Glu Glu Lys Val  
290 295 300

Asp Thr Asp Asp Arg Thr Glu Gly Tyr Leu Arg Ala Asp Ser Gln Glu  
305 310 315 320

Pro Ser His Phe Asp Ser Gln Gln Pro Ala Val Leu Glu Glu Glu Glu  
325 330 335

Val Met Ile Ala His Ala His Pro Gln Glu Val Tyr Asn Glu Tyr Val  
340 345 350

Pro Arg Gly Cys Lys Xaa Lys Cys His Ser His Phe His Asp Thr Leu  
355 360 365

Gly Gln Ser Asp Asp Leu Ile His His His His Asp Phe Phe Lys Lys  
370 375 380

Lys Lys Lys Lys Lys Lys Ile Lys Lys Lys Gln Lys Lys  
385 390 395

&lt;210&gt; 1532

&lt;211&gt; 130

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1532

Val Trp His Phe Ile Leu Phe Leu Cys Cys Trp Leu Cys Ile Leu Glu  
1 5 10 15

Gly Lys Lys Leu Leu Lys Gln Thr Ser Gln Phe Phe Phe Leu Phe Ser  
20 25 30

Asn Tyr Pro Val Gly Asn Ser Gln Tyr Gly Gln Gln Gln Asp Ala Tyr  
35 40 45

Gln Gly Pro Pro Pro Gln Gln Gly Tyr Pro Pro Gln Gln Gln Gln Tyr  
50 55 60

Pro Gly Gln Gln Gly Tyr Pro Gly Gln Gln Gln Gly Tyr Gly Pro Ser



&lt;400&gt; 1534

Gly Ala Ser Ala Arg Pro Pro Glu Arg Gly Pro His Pro Xaa Ala Ala  
1 5 10 15

Arg Asp Pro Arg Gly Pro Pro Leu Pro Leu Ser Phe Ser Ser Ala Pro  
20 25 30

Thr Asp Thr Phe His Ser Glu Val Ser Pro Ser Pro Leu Leu Lys Ser  
35 40 45

Pro Arg Ser Pro Leu His Pro Glu Val Ser Leu Tyr Arg Asp Pro Pro  
50 55 60

Ser Phe His Pro Glu Asp Arg Pro Asn Pro Arg Ser Pro Pro Leu Ser  
65 70 75 80

Xaa Ser Glu Arg Ala Ser Phe Gly Pro Lys Gln Pro Gly  
85 90

&lt;210&gt; 1535

&lt;211&gt; 150

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (75)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (83)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (106)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1535

Pro Glu Ser Leu Gly Gly Ser Pro Gly Pro Pro Arg Pro Arg Gln Ser  
1 5 10 15

Cys Ser Glu Thr Ser Val Val Leu Lys Cys His Ser Pro Arg Pro Gly  
20 25 30

Arg His Arg Ser Pro Glu Ser Trp Ala Leu Gly Thr Leu Glu Ala Ala  
35 40 45

Ala Pro Gly Thr Arg Gly Arg Pro Gly Ala Gly Glu Leu Arg Cys Trp  
50 55 60

Glu Arg Ala Val Phe Ala Asp Ser Gly Gly Xaa Gly Gly Ser Arg Pro  
65 70 75 80

Gly Ser Xaa Pro Gly Met Thr Met Leu Met Glu Leu Met Gly Gln Glu  
85 90 95

Trp Glu Arg Arg Ser Ala Ala Phe Cys Xaa Cys Ala Ser Ile Ala Lys  
100 105 110

Phe His Ser Pro Ser Ser Ala Ala Leu Leu Leu Ala Cys Gly Ser Pro  
115 120 125

Arg Tyr Asn Phe Trp Ser Cys Leu Phe Leu Leu Met Ser Phe Thr Val  
130 135 140

Asn Lys Phe Asp Cys His  
145 150

<210> 1536  
<211> 74  
<212> PRT  
<213> Homo sapiens

<400> 1536  
Leu Thr Tyr Ser Lys Asn Ala Pro Ile Leu Ser Asn Ser Met Pro Phe  
1 5 10 15

Asp Lys Cys Ser Val Pro Met Pro Arg Pro Pro Gln Ser Arg Glu Asn  
20 25 30

Ile Phe Ile Thr Pro Glu Gly Leu Leu Cys Ser Glu Tyr Ser Leu Gly  
35 40 45

Val Pro Ala Ala Gly Asp Ile Asp Leu Phe Ser Val Thr Val Asp Glu  
50 55 60

Ile Cys Leu Leu Tyr Thr Ile Phe Lys Asn  
65 70

<210> 1537  
<211> 224  
<212> PRT  
<213> Homo sapiens



&lt;400&gt; 1537

Gly Thr Ser Arg Pro Val Ala Pro Glu Cys Thr Glu Asp Gly Gly Cys  
1 5 10 15

Cys Arg Thr Val Ala Pro Ser Val Gly Ser Ser Cys His Ala Pro Ala  
20 25 30

Val Thr Gln His Ala Pro Tyr Phe Lys Gly Thr Ala Val Val Asn Gly  
35 40 45

Glu Phe Lys Asp Leu Ser Leu Asp Asp Phe Lys Gly Lys Tyr Leu Val  
50 55 60

Leu Phe Phe Tyr Pro Leu Asp Phe Thr Phe Val Cys Pro Thr Glu Ile  
65 70 75 80

Val Ala Phe Ser Asp Lys Ala Asn Glu Phe His Asp Val Asn Cys Glu  
85 90 95

Val Val Ala Val Ser Val Asp Ser His Phe Ser His Leu Ala Trp Ile  
100 105 110

Asn Thr Pro Arg Lys Asn Gly Gly Leu Gly His Met Asn Ile Ala Leu  
115 120 125

Leu Ser Asp Leu Thr Lys Gln Ile Ser Arg Asp Tyr Gly Val Leu Leu  
130 135 140

Glu Gly Ser Gly Leu Ala Leu Arg Gly Leu Phe Ile Ile Asp Pro Asn  
145 150 155 160

Gly Val Ile Lys His Leu Ser Val Asn Asp Leu Pro Val Gly Arg Ser  
165 170 175

Val Glu Glu Thr Leu Arg Leu Val Lys Ala Phe Gln Tyr Val Glu Thr  
180 185 190

His Gly Glu Val Cys Pro Ala Asn Trp Thr Pro Asp Ser Pro Thr Ile  
195 200 205

Lys Pro Ser Pro Ala Ala Ser Lys Glu Tyr Phe Gln Lys Val Asn Gln  
210 215 220

&lt;210&gt; 1538

&lt;211&gt; 524

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1538

Ser Ile Met Asn Ile Asn Asp Leu Lys Leu Thr Leu Ser Lys Ala Gly  
1 5 10 15

Gln Glu His Leu Leu Arg Phe Trp Asn Glu Leu Glu Glu Ala Gln Gln  
20 25 30

Val Glu Leu Tyr Ala Glu Leu Gln Ala Met Asn Phe Glu Glu Leu Asn  
35 40 45

Phe Phe Phe Gln Lys Ala Ile Glu Gly Phe Asn Gln Ser Ser His Gln  
50 55 60

Lys Asn Val Asp Ala Arg Met Glu Pro Val Pro Arg Glu Val Leu Gly  
65 70 75 80

Ser Ala Thr Arg Asp Gln Asp Gln Leu Gln Ala Trp Glu Ser Glu Gly  
85 90 95

Leu Phe Gln Ile Ser Gln Asn Lys Val Ala Val Leu Leu Leu Ala Gly  
100 105 110

Gly Gln Gly Thr Arg Leu Gly Val Ala Tyr Pro Lys Gly Met Tyr Asp  
115 120 125

Val Gly Leu Pro Ser Arg Lys Thr Leu Phe Gln Ile Gln Ala Glu Arg  
130 135 140

Ile Leu Lys Leu Gln Gln Val Ala Glu Lys Tyr Tyr Gly Asn Lys Cys  
145 150 155 160

Ile Ile Pro Trp Tyr Ile Met Thr Ser Gly Arg Thr Met Glu Ser Thr  
165 170 175

Lys Glu Phe Phe Thr Lys His Lys Tyr Phe Gly Leu Lys Lys Glu Asn  
180 185 190

Val Ile Phe Phe Gln Gln Gly Met Leu Pro Ala Met Ser Phe Asp Gly  
195 200 205

Lys Ile Ile Leu Glu Glu Lys Asn Lys Val Ser Met Ala Pro Asp Gly  
210 215 220

Asn Gly Gly Leu Tyr Arg Ala Leu Ala Ala Gln Asn Ile Val Glu Asp  
225 230 235 240

Met Glu Gln Arg Gly Ile Trp Ser Ile His Val Tyr Cys Val Asp Asn  
245 250 255

Ile Leu Val Lys Val Ala Asp Pro Arg Phe Ile Gly Phe Cys Ile Gln  
 260 265 270  
 Lys Gly Ala Asp Cys Gly Ala Lys Val Val Glu Lys Thr Asn Pro Thr  
 275 280 285  
 Glu Pro Val Gly Val Val Cys Arg Val Asp Gly Val Tyr Gln Val Val  
 290 295 300  
 Glu Tyr Ser Glu Ile Ser Leu Ala Thr Ala Gln Lys Arg Ser Ser Asp  
 305 310 315 320  
 Gly Arg Leu Leu Phe Asn Ala Gly Asn Ile Ala Asn His Phe Phe Thr  
 325 330 335  
 Val Pro Phe Leu Arg Asp Val Val Asn Val Tyr Glu Pro Gln Leu Gln  
 340 345 350  
 His His Val Ala Gln Lys Lys Ile Pro Tyr Val Asp Thr Gln Gly Gln  
 355 360 365  
 Leu Ile Lys Pro Asp Lys Pro Asn Gly Ile Lys Met Glu Lys Phe Val  
 370 375 380  
 Phe Asp Ile Phe Gln Phe Ala Lys Lys Phe Val Val Tyr Glu Val Leu  
 385 390 395 400  
 Arg Glu Asp Glu Phe Ser Pro Leu Lys Asn Ala Asp Ser Gln Asn Gly  
 405 410 415  
 Lys Asp Asn Pro Thr Thr Ala Arg His Ala Leu Met Ser Leu His His  
 420 425 430  
 Cys Trp Val Leu Asn Ala Gly Gly His Phe Ile Asp Glu Asn Gly Ser  
 435 440 445  
 Arg Leu Pro Ala Ile Pro Arg Ser Ala Thr Asn Gly Lys Ser Glu Thr  
 450 455 460  
 Ile Thr Ala Asp Val Asn His Asn Leu Lys Asp Ala Asn Asp Val Pro  
 465 470 475 480  
 Ile Gln Cys Glu Ile Ser Pro Leu Ile Ser Tyr Ala Gly Glu Gly Leu  
 485 490 495  
 Glu Ser Tyr Val Ala Asp Lys Glu Phe His Ala Pro Leu Ile Ile Asp  
 500 505 510  
 Glu Asn Gly Val His Glu Leu Val Lys Asn Gly Ile  
 515 520

&lt;210&gt; 1539

&lt;211&gt; 336

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1539

His Phe Ile Phe Leu Leu Lys Asn Phe Gln Gln Ser Ser Asn Asp Thr  
 1 5 10 15

Phe Pro Thr Ala Met His Ile Ala Ala Ala Ile Glu Val His Glu Val  
 20 25 30

Leu Leu Pro Gly Leu Gln Lys Leu His Asp Ala Leu Asp Ala Lys Ser  
 35 40 45

Lys Glu Phe Ala Gln Ile Ile Lys Ile Gly Arg Thr His Thr Gln Asp  
 50 55 60

Ala Val Pro Leu Thr Leu Gly Gln Glu Phe Ser Gly Tyr Val Gln Gln  
 65 70 75 80

Val Lys Tyr Ala Met Thr Arg Ile Lys Ala Ala Met Pro Arg Ile Tyr  
 85 90 95

Glu Leu Ala Ala Gly Gly Thr Ala Val Gly Thr Gly Leu Asn Thr Arg  
 100 105 110

Ile Gly Phe Ala Glu Lys Val Ala Ala Lys Val Ala Ala Leu Thr Gly  
 115 120 125

Leu Pro Phe Val Thr Ala Pro Asn Lys Phe Glu Ala Leu Ala Ala His  
 130 135 140

Asp Ala Leu Val Glu Leu Ser Gly Ala Met Asn Thr Thr Ala Cys Ser  
 145 150 155 160

Leu Met Lys Ile Ala Asn Asp Ile Arg Phe Leu Gly Ser Gly Pro Arg  
 165 170 175

Ser Gly Leu Gly Glu Leu Ile Leu Pro Glu Asn Glu Pro Gly Ser Ser  
 180 185 190

Ile Met Pro Gly Lys Val Asn Pro Thr Gln Cys Glu Ala Met Thr Met  
 195 200 205

Val Ala Ala Gln Val Met Gly Asn His Val Ala Val Thr Val Gly Gly  
 210 215 220

Ser Asn Gly His Phe Glu Leu Asn Val Phe Lys Pro Met Met Ile Lys

225                      230                      235                      240  
 Asn Val Leu His Ser Ala Arg Leu Leu Gly Asp Ala Ser Val Ser Phe  
                          245                      250                      255  
 Thr Glu Asn Cys Val Val Gly Ile Gln Ala Asn Thr Glu Arg Ile Asn  
                          260                      265                      270  
 Lys Leu Met Asn Glu Ser Leu Met Leu Val Thr Ala Leu Asn Pro His  
                          275                      280                      285  
 Ile Gly Tyr Asp Lys Ala Ala Lys Ile Ala Lys Thr Ala His Lys Asn  
                          290                      295                      300  
 Gly Ser Thr Leu Lys Glu Thr Ala Ile Glu Leu Gly Tyr Leu Thr Ala  
 305                      310                      315                      320  
 Glu Gln Phe Asp Glu Trp Val Lys Pro Lys Asp Met Leu Gly Pro Lys  
                          325                      330                      335

&lt;210&gt; 1540

&lt;211&gt; 126

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1540

Gly Val Val Lys Ser Leu Leu Phe Thr Arg Cys Asn Val Leu Val Pro  
   1                      5                      10                      15  
 Tyr Lys Gln Gly Trp Gly Gly Glu Gly Arg Ala Lys Thr Asn Ile Glu  
                          20                      25                      30  
 Ile Leu Lys Gln Gln Gln Ser Glu Trp Ile Leu Phe Phe Val Ile Val  
                          35                      40                      45  
 Gly Gly Leu Lys Asn Ser Pro His Val Ile Ile Val Asn Thr Leu Leu  
                          50                      55                      60  
 Cys Gly His Cys Asn Ile Trp Gly Val Gly Gln Gly Gly Lys Val Thr  
                          65                      70                      75                      80  
 Ile Val His Met Ser Leu Ala Ser Val Gln Ser Ser Val Gln Asn Val  
                          85                      90                      95  
 Met Leu Phe Cys Lys Lys Arg Phe Met Ile Phe Lys Ile Asn Leu Val  
                          100                      105                      110

Asn Leu Phe Leu Val Val Ile Phe Phe Leu Arg Gln Ser Phe  
115 120 125

<210> 1541  
<211> 50  
<212> PRT  
<213> Homo sapiens

<400> 1541  
Asn Ser Ala Arg Val Cys Ile Leu Ser Arg Asp Arg Val Ser Pro Cys  
1 5 10 15

Trp Leu Gly Trp Cys Leu Ser Leu Asp Leu Val Ile His Pro Pro Gln  
20 25 30

Pro Pro Arg Val Leu Gly Leu Gln Val Arg Ala Thr Ala Pro Gly Trp  
35 40 45

Phe Ser  
50

<210> 1542  
<211> 45  
<212> PRT  
<213> Homo sapiens

<400> 1542  
Asp Phe Phe Leu Asn Ile Ser Glu Phe Glu Gly Asn Thr Asp Arg Phe  
1 5 10 15

Leu Pro Ser Ser Leu Pro Ile Thr His Leu Ser Asp Asn Thr Leu Leu  
20 25 30

Ile Glu Glu Val Ile Arg Ile Ile Phe Lys Phe Gln Ile  
35 40 45

<210> 1543  
<211> 239  
<212> PRT  
<213> Homo sapiens

<400> 1543  
Ile Ala Leu Pro Pro Ser Phe Gln Pro Gln Ser Asp Gly Arg Gly Asp  
1 5 10 15

Ala Ser Gly Arg Asn Ala Ala Met Ala Ala Gln Gly Glu Pro Gln Val  
20 25 30

Gln Phe Lys Leu Val Leu Val Gly Asp Gly Gly Thr Gly Lys Thr Thr  
35 40 45

Phe Val Lys Arg His Leu Thr Gly Glu Phe Glu Lys Lys Tyr Val Ala  
50 55 60

Thr Leu Gly Val Glu Val His Pro Leu Val Phe His Thr Asn Arg Gly  
65 70 75 80

Pro Ile Lys Phe Asn Val Trp Asp Thr Ala Gly Gln Glu Lys Phe Gly  
85 90 95

Gly Leu Arg Asp Gly Tyr Tyr Ile Gln Ala Gln Cys Ala Ile Ile Met  
100 105 110

Phe Asp Val Thr Ser Arg Val Thr Tyr Lys Asn Val Pro Asn Trp His  
115 120 125

Arg Asp Leu Val Arg Val Cys Glu Asn Ile Pro Ile Val Leu Cys Gly  
130 135 140

Asn Lys Val Asp Ile Lys Asp Arg Lys Val Lys Ala Lys Ser Ile Val  
145 150 155 160

Phe His Arg Lys Lys Asn Leu Gln Tyr Tyr Asp Ile Ser Ala Lys Ser  
165 170 175

Asn Tyr Asn Phe Glu Lys Pro Phe Leu Trp Leu Ala Arg Lys Leu Ile  
180 185 190

Gly Asp Pro Asn Leu Glu Phe Val Ala Met Pro Ala Leu Ala Pro Pro  
195 200 205

Glu Val Val Met Asp Pro Ala Leu Ala Ala Gln Tyr Glu His Asp Leu  
210 215 220

Glu Val Ala Gln Thr Thr Ala Leu Pro Asp Glu Asp Asp Asp Leu  
225 230 235

&lt;210&gt; 1544

&lt;211&gt; 109

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1544

Val Val Thr Gly Ser Gly Ser Trp His Gln Val Ala Ser Ile Ile Arg  
 1 5 10 15  
 Ser Leu Thr Glu Asp Asn Met Gln Asn Ser His Met Asp Glu Tyr Arg  
 20 25 30  
 Asn Ser Ser Asn Gly Ser Thr Gly Asn Ser Ser Glu Val Val Val Glu  
 35 40 45  
 His Pro Thr Asp Phe Ser Thr Glu Ile Met Asn Val Thr Glu Met Glu  
 50 55 60  
 Gln Ser Pro Asp Asp Ser Pro Asn Val Asn Ala Ser Thr Glu Glu Thr  
 65 70 75 80  
 Glu Met Ala Ser Ala Val Asp Leu Pro Val Thr Leu Thr Glu Thr Glu  
 85 90 95  
 Ala Ile Ser Leu Gln Asn Met Lys Asn Phe Gly Lys Leu  
 100 105

<210> 1545  
 <211> 199  
 <212> PRT  
 <213> Homo sapiens

<400> 1545  
 Thr His Ala Ser Gly Pro Thr Arg Pro Gly Lys Met Ala Leu Ala Met  
 1 5 10 15  
 Leu Val Leu Val Val Ser Pro Trp Ser Ala Ala Arg Gly Val Leu Arg  
 20 25 30  
 Asn Tyr Trp Glu Arg Leu Leu Arg Lys Leu Pro Gln Ser Arg Pro Gly  
 35 40 45  
 Phe Pro Ser Pro Pro Trp Gly Pro Ala Leu Ala Val Gln Gly Pro Ala  
 50 55 60  
 Met Phe Thr Glu Pro Ala Asn Asp Thr Ser Gly Ser Lys Glu Asn Ser  
 65 70 75 80  
 Ser Leu Leu Asp Ser Ile Phe Trp Met Ala Ala Pro Lys Asn Arg Arg  
 85 90 95  
 Thr Ile Glu Val Asn Arg Cys Arg Arg Arg Asn Pro Gln Lys Leu Ile  
 100 105 110  
 Lys Val Lys Asn Asn Ile Asp Val Cys Pro Glu Cys Gly His Leu Lys



115                      120                      125  
 Gln Lys His Val Leu Cys Ala Tyr Cys Tyr Glu Lys Val Cys Lys Glu  
     130                      135                      140  
 Thr Ala Glu Ile Arg Arg Gln Ile Gly Lys Gln Glu Gly Gly Pro Phe  
     145                      150                      155                      160  
 Lys Ala Pro Thr Ile Glu Thr Val Val Leu Tyr Thr Gly Glu Thr Pro  
                     165                      170                      175  
 Ser Glu Gln Asp Gln Gly Lys Arg Ile Ile Glu Arg Asp Arg Lys Arg  
                     180                      185                      190  
 Pro Ser Trp Phe Thr Gln Asn  
     195

<210> 1546  
 <211> 163  
 <212> PRT  
 <213> Homo sapiens

<400> 1546  
 Pro Thr Arg Pro Pro Thr Arg Pro Arg Arg Trp Arg Arg Arg Thr Ala  
     1                      5                      10                      15  
 Pro Glu Arg Ala Gly Ala Met Ser Ala Ala Arg Pro Gln Phe Ser Ile  
                     20                      25                      30  
 Asp Asp Ala Phe Glu Leu Ser Leu Glu Asp Gly Gly Pro Gly Pro Glu  
                     35                      40                      45  
 Ser Ser Gly Val Ala Arg Phe Gly Pro Leu His Phe Glu Arg Arg Ala  
                     50                      55                      60  
 Arg Phe Glu Val Ala Asp Glu Asp Lys Gln Ser Arg Leu Arg Tyr Gln  
                     65                      70                      75                      80  
 Asn Leu Glu Asn Asp Glu Asp Gly Ala Gln Ala Ser Pro Glu Pro Asp  
                     85                      90                      95  
 Gly Gly Val Gly Thr Arg Leu Gly Pro Gly Ile Pro Ala Glu Leu Pro  
                     100                      105                      110  
 Pro Gly Leu Pro Val Leu Leu Pro Ala Leu Leu Arg Glu Val Ile Ala  
                     115                      120                      125  
 Ala Gln Arg Gly Pro Leu Ala Pro Met Gly Ala Pro Leu Leu Pro Cys  
                     130                      135                      140

Ser Val Pro Leu Ile Ser Arg Glu Glu Ala Leu Gln Asp Pro Arg Asn  
 145 150 155 160

Pro Ser Pro

<210> 1547

<211> 176

<212> PRT

<213> Homo sapiens

<400> 1547

Ser Thr His Ala Ser Ala His Ala Ser Gly Pro Val Pro Ser Ala Ala  
 1 5 10 15

Ser Ser Ala Gly Gly Ser Gly Gly Leu Ser Phe Arg Ala Ala Ser Ser  
 20 25 30

Leu Pro Val Ser Pro Ser Leu Ala Val Ser Met Lys Ala Phe Ser Pro  
 35 40 45

Val Arg Ser Val Arg Lys Asn Ser Leu Ser Asp His Ser Leu Gly Ile  
 50 55 60

Ser Arg Ser Lys Thr Pro Val Asp Asp Pro Met Ser Leu Leu Tyr Asn  
 65 70 75 80

Met Asn Asp Cys Tyr Ser Lys Leu Lys Glu Leu Val Pro Ser Ile Pro  
 85 90 95

Gln Asn Lys Lys Val Ser Lys Met Glu Ile Leu Gln His Val Ile Asp  
 100 105 110

Tyr Ile Leu Asp Leu Gln Ile Ala Leu Asp Ser His Pro Thr Ile Val  
 115 120 125

Ser Leu His His Gln Arg Pro Gly Gln Asn Gln Ala Ser Arg Thr Pro  
 130 135 140

Leu Thr Thr Leu Asn Thr Asp Ile Ser Ile Leu Ser Leu Gln Ala Ser  
 145 150 155 160

Glu Phe Pro Ser Glu Leu Met Ser Asn Asp Ser Lys Ala Leu Cys Gly  
 165 170 175

<210> 1548  
 <211> 69  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (37)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (59)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (63)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 1548  
 Lys Lys Ser Leu Arg Cys Glu Tyr Arg Ile Asp Ile Glu Arg Leu Tyr  
     1                    5                    10                    15  
 Met Ser Lys Thr His Leu Ser Ser Ser His Arg Pro Leu Gln Ser Gly  
                     20                    25                    30  
 His Val Gly Gln Xaa Gly Thr Gly Ala Gly Asp Ala Pro Pro Gly Gln  
                     35                    40                    45  
 Asn Ala Pro Phe Val Ala Leu Pro Asp Thr Xaa Tyr Leu Leu Xaa Lys  
                     50                    55                    60  
 Arg Glu Thr Gly Ser  
     65

<210> 1549  
 <211> 41  
 <212> PRT  
 <213> Homo sapiens

<400> 1549  
 Ile Leu Leu Tyr Lys His Phe His Ile Leu Pro Leu His Leu Thr Ile  
     1                    5                    10                    15  
 Gln His Lys Gln Leu Leu Met Ala Leu Arg Ile Val Cys Thr Cys Asn  
                     20                    25                    30

Phe Glu Trp Leu Tyr Ala Val Ser Ser  
35 40

<210> 1550  
<211> 61  
<212> PRT  
<213> Homo sapiens

<400> 1550  
Phe Phe Ala Pro Leu Lys Pro Val Arg Ile Thr Met Glu Tyr Ser Ser  
1 5 10 15  
Ser Gly Lys Ala Thr Gly Glu Ala Asp Val His Phe Glu Thr His Glu  
20 25 30  
Asp Ala Val Ala Ala Met Leu Lys Asp Arg Ser His Val His His Arg  
35 40 45  
Tyr Ile Glu Leu Phe Leu Asn Ser Cys Pro Lys Gly Lys  
50 55 60

<210> 1551  
<211> 114  
<212> PRT  
<213> Homo sapiens

<400> 1551  
Gly Ser Leu Ala Ser Phe Leu Ala Cys Ser Ser Glu Phe Phe Gln Pro  
1 5 10 15  
Pro Pro Thr Ala Gln Phe Gln Ser His Phe Ser Thr Phe Arg Tyr Leu  
20 25 30  
Leu Gln Gln His Leu Lys Tyr Leu Glu Asn Ser Phe Met Pro Ala Ser  
35 40 45  
Leu Pro Asp Asp Leu Asn Met Val Leu Asp Leu Glu Phe Thr Phe Leu  
50 55 60  
Gln Gly His Cys Leu Phe Gln Arg Gly Glu Phe Thr Cys Ala Arg Val  
65 70 75 80  
Phe Thr Leu Gly Val Leu Pro Glu Leu Pro Gln Asp Glu Ser Gly Glu  
85 90 95  
Pro Thr Thr Ala Glu Lys Phe Ser Gln Cys Arg Asn Ile Glu Glu Phe

100

105

110

Ser Lys

&lt;210&gt; 1552

&lt;211&gt; 450

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (185)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (200)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (414)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (420)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (429)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (442)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1552

Thr	Gly	Cys	Gly	Lys	Thr	Thr	Gln	Val	Thr	Gln	Phe	Ile	Leu	Asp	Asn
1				5				10					15		

Tyr	Ile	Glu	Arg	Gly	Lys	Gly	Ser	Ala	Cys	Arg	Ile	Val	Cys	Thr	Gln
		20				25						30			

Pro	Arg	Arg	Ile	Ser	Ala	Ile	Ser	Val	Ala	Glu	Arg	Val	Ala	Ala	Glu
		35					40					45			

Arg Ala Glu Ser Cys Gly Ser Gly Asn Ser Thr Gly Tyr Gln Ile Arg  
 50 55 60

Leu Gln Ser Arg Leu Pro Arg Lys Gln Gly Ser Ile Leu Tyr Cys Thr  
 65 70 75 80

Thr Gly Ile Ile Leu Gln Trp Leu Gln Ser Asp Pro Tyr Leu Ser Ser  
 85 90 95

Val Ser His Ile Val Leu Asp Glu Ile His Glu Arg Asn Leu Gln Ser  
 100 105 110

Asp Val Leu Met Thr Val Val Lys Asp Leu Leu Asn Phe Arg Ser Asp  
 115 120 125

Leu Lys Val Ile Leu Met Ser Ala Thr Leu Asn Ala Glu Lys Phe Ser  
 130 135 140

Glu Tyr Phe Gly Asn Cys Pro Met Ile His Ile Pro Gly Phe Thr Phe  
 145 150 155 160

Pro Val Val Glu Tyr Leu Leu Glu Asp Val Ile Glu Lys Ile Arg Tyr  
 165 170 175

Val Pro Glu Gln Lys Glu His Arg Xaa Gln Phe Lys Arg Gly Phe Met  
 180 185 190

Gln Gly His Val Asn Arg Gln Xaa Lys Glu Glu Lys Glu Ala Ile Tyr  
 195 200 205

Lys Glu Arg Trp Pro Asp Tyr Val Arg Glu Leu Arg Arg Arg Tyr Ser  
 210 215 220

Ala Ser Thr Val Asp Val Ile Glu Met Met Glu Asp Asp Lys Val Asp  
 225 230 235 240

Leu Asn Leu Ile Val Ala Leu Ile Arg Tyr Ile Val Leu Glu Glu Glu  
 245 250 255

Asp Gly Ala Ile Leu Val Phe Leu Pro Gly Trp Asp Asn Ile Ser Thr  
 260 265 270

Leu His Asp Leu Leu Met Ser Gln Val Met Phe Lys Ser Asp Lys Phe  
 275 280 285

Leu Ile Ile Pro Leu His Ser Leu Met Pro Thr Val Asn Gln Thr Gln  
 290 295 300

Val Phe Lys Arg Thr Pro Pro Gly Val Arg Lys Ile Val Ile Ala Thr  
 305 310 315 320

Asn Ile Ala Glu Thr Ser Ile Thr Ile Asp Asp Val Val Tyr Val Ile  
325 330 335

Asp Gly Gly Lys Ile Lys Glu Thr His Phe Asp Thr Gln Asn Asn Ile  
340 345 350

Ser Thr Met Ser Ala Glu Trp Val Ser Lys Ala Asn Ala Lys Gln Arg  
355 360 365

Lys Gly Arg Ala Gly Arg Val Gln Pro Gly His Cys Tyr His Leu Tyr  
370 375 380

Asn Gly Leu Arg Ala Ser Leu Leu Asp Asp Tyr Gln Leu Pro Glu Ile  
385 390 395 400

Leu Arg Thr Pro Leu Glu Glu Leu Cys Leu Gln Ile Lys Xaa Phe Lys  
405 410 415

Ala Arg Trp Xaa Cys Leu Phe Leu Ser Arg Leu Met Xaa Pro Pro Ser  
420 425 430

Asn Glu Ala Val Leu Leu Ser Ile Arg Xaa Leu Met Glu Leu Glu Arg  
435 440 445

Phe Gly  
450

<210> 1553

<211> 446

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (61)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (64)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (99)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1553

Glu Leu Leu Ala Val Val Gly Pro Val Gly Ala Gly Lys Ser Ser Leu  
1 5 10 15  
Leu Ser Ala Val Leu Gly Glu Leu Ala Pro Ser His Gly Leu Val Ser  
20 25 30  
Val His Gly Arg Ile Ala Tyr Val Ser Gln Gln Pro Trp Val Phe Ser  
35 40 45  
Gly Thr Leu Arg Ser Asn Ile Leu Phe Gly Lys Lys Xaa Glu Lys Xaa  
50 55 60  
Arg Tyr Glu Lys Val Ile Lys Ala Cys Ala Leu Lys Lys Asp Leu Gln  
65 70 75 80  
Leu Leu Glu Asp Gly Asp Leu Thr Val Ile Gly Asp Arg Gly Thr Thr  
85 90 95  
Leu Ser Xaa Gly Gln Lys Ala Arg Val Asn Leu Ala Arg Ala Val Tyr  
100 105 110  
Gln Asp Ala Asp Ile Tyr Leu Leu Asp Asp Pro Leu Ser Ala Val Asp  
115 120 125  
Ala Glu Val Ser Arg His Leu Phe Glu Leu Cys Ile Cys Gln Ile Leu  
130 135 140  
His Glu Lys Ile Thr Ile Leu Val Thr His Gln Leu Gln Tyr Leu Lys  
145 150 155 160  
Ala Ala Ser Gln Ile Leu Ile Leu Lys Asp Gly Lys Met Val Gln Lys  
165 170 175  
Gly Thr Tyr Thr Glu Phe Leu Lys Ser Gly Ile Asp Phe Gly Ser Leu  
180 185 190  
Leu Lys Lys Asp Asn Glu Glu Ser Glu Gln Pro Pro Val Pro Gly Thr  
195 200 205  
Pro Thr Leu Arg Asn Arg Thr Phe Ser Glu Ser Ser Val Trp Ser Gln  
210 215 220  
Gln Ser Ser Arg Pro Ser Leu Lys Asp Gly Ala Leu Glu Ser Gln Asp  
225 230 235 240  
Thr Glu Asn Val Pro Val Thr Leu Ser Glu Glu Asn Arg Ser Glu Gly  
245 250 255  
Lys Val Gly Phe Gln Ala Tyr Lys Asn Tyr Phe Arg Ala Gly Ala His  
260 265 270



Trp Ile Val Phe Ile Phe Leu Ile Leu Leu Asn Thr Ala Ala Gln Val  
 275 280 285

Ala Tyr Val Leu Gln Asp Trp Trp Leu Ser Tyr Trp Ala Asn Lys Gln  
 290 295 300

Ser Met Leu Asn Val Thr Val Asn Gly Gly Gly Asn Val Thr Glu Lys  
 305 310 315 320

Leu Asp Leu Asn Trp Tyr Leu Gly Ile Tyr Ser Gly Leu Thr Val Ala  
 325 330 335

Thr Val Leu Phe Gly Ile Ala Arg Ser Leu Leu Val Phe Tyr Val Leu  
 340 345 350

Val Asn Ser Ser Gln Thr Leu His Asn Lys Met Phe Glu Ser Ile Leu  
 355 360 365

Lys Ala Pro Val Leu Phe Phe Asp Arg Asn Pro Ile Gly Arg Ile Leu  
 370 375 380

Asn Arg Phe Ser Lys Asp Ile Gly His Leu Asp Asp Leu Leu Pro Leu  
 385 390 395 400

Thr Phe Leu Asp Phe Ile Gln Val Thr Leu Arg Val Met Ser Gly Ser  
 405 410 415

Gln Met Glu Asn Gly Ser Ser Tyr Phe Phe Lys Pro Phe Ser Trp Gly  
 420 425 430

Leu Gly Val Gly Leu Ser Ala Trp Leu Cys Val Met Leu Thr  
 435 440 445

<210> 1554

<211> 446

<212> PRT

<213> Homo sapiens

<400> 1554

Arg Lys Cys Glu Leu Ala His Cys Ser Leu Gly Val Phe Gly Val Arg  
 1 5 10 15

Met Ala Leu Glu Gly Met Ser Lys Arg Lys Arg Lys Arg Ser Val Gln  
 20 25 30

Glu Gly Glu Asn Pro Asp Asp Gly Val Arg Gly Ser Pro Pro Glu Asp  
 35 40 45

Tyr Arg Leu Gly Gln Val Ala Ser Ser Leu Phe Arg Gly Glu His His

50	55	60
Ser Arg Gly Gly Thr Gly Arg Leu Ala Ser Leu Phe Ser Ser Leu Glu		
65	70	75 80
Pro Gln Ile Gln Pro Val Tyr Val Pro Val Pro Lys Gln Thr Ile Lys		
	85	90 95
Lys Thr Lys Arg Asn Glu Glu Glu Glu Ser Thr Ser Gln Ile Glu Arg		
	100	105 110
Pro Leu Ser Gln Glu Pro Ala Lys Lys Val Lys Ala Lys Lys Lys His		
	115	120 125
Thr Asn Ala Glu Lys Lys Leu Ala Asp Arg Glu Ser Ala Leu Ala Ser		
	130	135 140
Ala Asp Leu Glu Glu Glu Ile His Gln Lys Gln Gly Gln Lys Arg Lys		
	145	150 155 160
Asn Ser Gln Pro Gly Val Lys Val Ala Asp Arg Lys Ile Leu Asp Asp		
	165	170 175
Thr Glu Asp Thr Val Val Ser Gln Arg Lys Lys Ile Gln Ile Asn Gln		
	180	185 190
Glu Glu Glu Arg Leu Lys Asn Glu Arg Thr Val Phe Val Gly Asn Leu		
	195	200 205
Pro Val Thr Cys Asn Lys Lys Lys Leu Lys Ser Phe Phe Lys Glu Tyr		
	210	215 220
Gly Gln Ile Glu Ser Val Arg Phe Arg Ser Leu Ile Pro Ala Glu Gly		
	225	230 235 240
Thr Leu Ser Lys Lys Leu Ala Ala Ile Lys Arg Lys Ile His Pro Asp		
	245	250 255
Gln Lys Asn Ile Asn Ala Tyr Val Val Phe Lys Glu Glu Ser Ala Ala		
	260	265 270
Thr Gln Ala Leu Lys Arg Asn Gly Ala Gln Ile Ala Asp Gly Phe Arg		
	275	280 285
Ile Arg Val Asp Leu Ala Ser Glu Thr Ser Ser Arg Asp Lys Arg Ser		
	290	295 300
Val Phe Val Gly Asn Leu Pro Tyr Lys Val Glu Glu Ser Ala Ile Glu		
	305	310 315 320
Lys His Phe Leu Asp Cys Gly Ser Ile Met Ala Val Arg Ile Val Arg		

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                325                330                335
Asp Lys Met Thr Gly Ile Gly Lys Gly Phe Gly Tyr Val Leu Phe Glu
      340                345                350
Asn Thr Asp Ser Val His Leu Ala Leu Lys Leu Asn Asn Ser Glu Leu
      355                360                365
Met Gly Arg Lys Leu Arg Val Met Arg Ser Val Asn Lys Glu Lys Phe
      370                375                380
Lys Gln Gln Asn Ser Asn Pro Arg Leu Lys Asn Val Ser Lys Pro Lys
      385                390                395                400
Gln Gly Leu Asn Phe Thr Ser Lys Thr Ala Glu Gly His Pro Lys Ser
      405                410                415
Leu Phe Ile Gly Glu Lys Ala Val Leu Leu Lys Thr Lys Lys Lys Gly
      420                425                430
Gln Lys Lys Ser Gly Arg Pro Lys Lys Gln Arg Lys Gln Lys
      435                440                445

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&lt;210&gt; 1555

&lt;211&gt; 115

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (3)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (19)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (51)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1555

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Ala Thr Xaa Val Gln His Gln Arg Ile His Thr Gly Glu Arg Pro Tyr
  1           5           10           15

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Glu Cys Xaa Glu Cys Gly Lys Thr Phe Ser Arg Lys Asp Asn Leu Thr
      20           25           30

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Gln His Lys Arg Ile His Thr Gly Glu Met Pro Tyr Lys Cys Asn Glu  
35 40 45  
Cys Gly Xaa Tyr Phe Ser His His Ser Asn Leu Ile Val His Gln Arg  
50 55 60  
Val His Asn Gly Ala Arg Pro Tyr Lys Cys Ser Asp Cys Gly Lys Val  
65 70 75 80  
Phe Arg His Lys Ser Thr Leu Val Gln His Glu Ser Ile His Thr Gly  
85 90 95  
Glu Asn Pro Tyr Val Ala Val Leu Trp Glu Ile Leu Trp Pro Gln Ile  
100 105 110  
His Pro His  
115

<210> 1556  
<211> 81  
<212> PRT  
<213> Homo sapiens

<400> 1556  
Cys Gly Lys Thr Ala Ile Arg Lys Arg Lys Tyr Arg Ser Leu Asn Asn  
1 5 10 15  
Leu Trp Val Arg Lys Ala Ser Leu Asn Asn Gln Lys Leu Ala Val Leu  
20 25 30  
Ala Leu Phe Ser Ser Leu Phe Met Lys Met Lys Ser Glu Ile Thr Lys  
35 40 45  
Cys Lys Pro Gly Asn Ile Ile Leu Val Leu Leu Ser Trp Ile His Val  
50 55 60  
Lys Lys Arg Leu His Ser Leu Leu Met Leu Pro Thr Ser Cys Gly Phe  
65 70 75 80  
Val

<210> 1557  
<211> 398  
<212> PRT  
<213> Homo sapiens

&lt;400&gt; 1557

Phe Arg Glu Met Val Ser Ser Ser Asn Leu Pro Gln Gly Trp Leu Glu  
 1 5 10 15  
 Val Gln Gly Ile Pro Glu Gly Trp Asp Gly Val Ala Gly Trp Tyr Leu  
 20 25 30  
 Pro Gly Ile Asn Pro Gly Arg Thr Ala Arg Arg Phe Ala Tyr Leu Phe  
 35 40 45  
 Val Asn Ile Asn Val Thr Ser Glu Pro His Glu Val Leu Ala Leu Trp  
 50 55 60  
 Phe Leu Trp Tyr Val Lys Gln Cys Gly Gly Thr Thr Arg Ile Phe Ser  
 65 70 75 80  
 Val Thr Asn Gly Gly Gln Glu Arg Lys Phe Val Gly Gly Ser Gly Gln  
 85 90 95  
 Val Ser Glu Arg Ile Met Asp Leu Leu Gly Asp Gln Val Lys Leu Asn  
 100 105 110  
 His Pro Val Thr His Val Asp Gln Ser Ser Asp Asn Ile Ile Ile Glu  
 115 120 125  
 Thr Leu Asn His Glu His Tyr Glu Cys Lys Tyr Val Ile Asn Ala Ile  
 130 135 140  
 Pro Pro Thr Leu Thr Ala Lys Ile His Phe Arg Pro Glu Leu Pro Ala  
 145 150 155 160  
 Glu Arg Asn Gln Leu Ile Gln Arg Leu Pro Met Gly Ala Val Ile Lys  
 165 170 175  
 Cys Met Met Tyr Tyr Lys Glu Ala Phe Trp Lys Lys Lys Asp Tyr Cys  
 180 185 190  
 Gly Cys Met Ile Ile Glu Asp Glu Asp Ala Pro Ile Ser Ile Thr Leu  
 195 200 205  
 Asp Asp Thr Lys Pro Asp Gly Ser Leu Pro Ala Ile Met Gly Phe Ile  
 210 215 220  
 Leu Ala Arg Lys Ala Asp Arg Leu Ala Lys Leu His Lys Glu Ile Arg  
 225 230 235 240  
 Lys Lys Lys Ile Cys Glu Leu Tyr Ala Lys Val Leu Gly Ser Gln Glu  
 245 250 255  
 Ala Leu His Pro Val His Tyr Glu Glu Lys Asn Trp Cys Glu Glu Gln

260 265 270  
 Tyr Ser Gly Gly Cys Tyr Thr Ala Tyr Phe Pro Pro Gly Ile Met Thr  
 275 280 285  
 Gln Tyr Gly Arg Val Ile Arg Gln Pro Val Gly Arg Ile Phe Phe Ala  
 290 295 300  
 Gly Thr Glu Thr Ala Thr Lys Trp Ser Gly Tyr Met Glu Gly Ala Val  
 305 310 315 320  
 Glu Ala Gly Glu Arg Ala Ala Arg Glu Val Leu Asn Gly Leu Gly Lys  
 325 330 335  
 Val Thr Glu Lys Asp Ile Trp Val Gln Glu Pro Glu Ser Lys Asp Val  
 340 345 350  
 Pro Ala Val Glu Ile Thr His Thr Phe Trp Glu Arg Asn Leu Pro Ser  
 355 360 365  
 Val Ser Gly Leu Leu Lys Ile Ile Gly Phe Ser Thr Ser Val Thr Ala  
 370 375 380  
 Leu Gly Phe Val Leu Tyr Lys Tyr Lys Leu Leu Pro Arg Ser  
 385 390 395

&lt;210&gt; 1558

&lt;211&gt; 401

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (58)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1558

Ser Leu Ala Ala Pro Gly Ile Pro Glu His Arg Gln Arg Gly Thr Glu  
 1 5 10 15  
 Lys Glu Ser Phe Phe Leu Gly Ser Gln Ser Arg Lys Gly Gly Ala Ala  
 20 25 30  
 Leu Ala Pro Ser Ala Gly Pro Ala Pro Arg Met Arg Ala Asp Ala Gly  
 35 40 45  
 Gly Arg Gly Cys Gly Ser Ala Asn Gly Xaa Pro Gly Ala Pro His Val  
 50 55 60

Arg Ala Ala Gly Pro Ala Ala Ala Val Pro Gly Ala Arg Val Val  
65 70 75 80

Cys Gly Gly Ser Arg Pro Arg Gln Gln Val Asp Ser Ser Lys Glu Ser  
85 90 95

Ala Glu Ala Ala Cys Asp Ile Leu Ser Gln Leu Val Asn Cys Ser Leu  
100 105 110

Lys Thr Leu Gly Leu Ile Ser Thr Ala Arg Pro Ser Phe Met Asp Leu  
115 120 125

Pro Lys Ser His Phe Ile Ser Ala Leu Thr Val Val Phe Val Asn Ser  
130 135 140

Lys Ser Leu Ser Ser Leu Lys Ile Asp Asp Thr Pro Val Asp Asp Pro  
145 150 155 160

Ser Leu Lys Val Leu Val Ala Asn Asn Ser Asp Thr Leu Lys Leu Leu  
165 170 175

Lys Met Ser Ser Cys Pro His Val Ser Pro Ala Gly Ile Leu Cys Val  
180 185 190

Ala Asp Gln Cys His Gly Leu Arg Glu Leu Ala Leu Asn Tyr His Leu  
195 200 205

Leu Ser Asp Glu Leu Leu Leu Ala Leu Ser Ser Glu Lys His Val Arg  
210 215 220

Leu Glu His Leu Arg Ile Asp Val Val Ser Glu Asn Pro Gly Gln Thr  
225 230 235 240

His Phe His Thr Ile Gln Lys Ser Ser Trp Asp Ala Phe Ile Arg His  
245 250 255

Ser Pro Lys Val Asn Leu Val Met Tyr Phe Phe Leu Tyr Glu Glu Glu  
260 265 270

Phe Asp Pro Phe Phe Arg Tyr Glu Ile Pro Ala Thr His Leu Tyr Phe  
275 280 285

Gly Arg Ser Val Ser Lys Asp Val Leu Gly Arg Val Gly Met Thr Cys  
290 295 300

Pro Arg Leu Val Glu Leu Val Val Cys Ala Asn Gly Leu Arg Pro Leu  
305 310 315 320

Asp Glu Glu Leu Ile Arg Ile Ala Glu Arg Cys Lys Asn Leu Ser Ala  
325 330 335

&lt;400&gt; 1560

Glu Leu Ser Pro Leu Ser Phe Arg Ser Thr Arg Gly Phe His Thr Tyr  
1 5 10 15

Phe Ile Glu His Pro Phe Ile Phe Ile Ser Val Tyr Arg Thr Lys Lys  
20 25 30

Asn Ser Ser Val Lys Asn Leu Cys Cys Gly Leu Ser Ile Phe Ala Ala  
35 40 45

Phe Gly Leu Arg Trp Arg Ile Lys Ala Ser Leu Pro Leu Ser Ser Val  
50 55 60

Phe Arg Lys Leu  
65

&lt;210&gt; 1561

&lt;211&gt; 80

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1561

Leu Met Met Thr Ile Tyr Ala Leu Ser Asn Glu Phe Ala Phe Lys Ile  
1 5 10 15

Asn Glu Glu Gln Leu Ser Phe Phe Pro Leu Leu Ser Val Gln Leu Trp  
20 25 30

His Ala Gln Arg Phe Leu Leu Asp Ser Ser Trp Ser Gly Val Ile Pro  
35 40 45

Phe Phe Phe Ser Cys Ser Cys Leu Pro Phe Leu Tyr Pro Pro Lys Trp  
50 55 60

Arg Gln Ile His Asp Leu Lys Asp Thr Gln Tyr Leu Leu Asn Ser Ser  
65 70 75 80

&lt;210&gt; 1562

&lt;211&gt; 198

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE



&lt;222&gt; (4)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (193)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1562

Arg Gly Leu Xaa Ser Arg Gly Ala Gly Gln Val Pro Gly Cys Leu Gly  
 1 5 10 15

Trp His Arg Ser Val Val Pro Gly Gly Ala Val Ala Ala Leu Pro Pro  
 20 25 30

Ser Arg Arg Gln Arg Val Arg Gly Pro Val Arg Pro Glu Pro Gly Ala  
 35 40 45

Thr Pro Arg Ala Val Leu Gly Glu Thr Arg Val Pro Val Leu Arg Leu  
 50 55 60

Leu Leu Gly Ser Ala Leu Val Gly Arg Leu Leu Asp Ser Leu Lys Arg  
 65 70 75 80

Asp Tyr Ala Gly Lys Pro Gln Pro Pro Ile Lys Ser Glu Arg Arg Asn  
 85 90 95

Pro Pro Ser Tyr Ala Met Ala Gly Lys Lys Val Leu Ile Val Tyr Ala  
 100 105 110

His Gln Glu Pro Lys Ser Phe Asn Gly Ser Leu Lys Asn Val Ala Val  
 115 120 125

Asp Glu Leu Ser Arg Gln Gly Cys Thr Val Thr Val Ser Asp Leu Tyr  
 130 135 140

Ala Met Asn Phe Glu Pro Arg Ala Thr Asp Lys Asp Ile Thr Gly Thr  
 145 150 155 160

Leu Ser Asn Pro Glu Val Phe Asn Tyr Gly Val Glu Thr His Glu Ala  
 165 170 175

Tyr Lys Gln Arg Ser Leu Ala Ser Asp Ile Thr Asp Glu Gln Lys Lys  
 180 185 190

Xaa Ser Gly Arg Leu Thr  
 195

&lt;210&gt; 1563

&lt;211&gt; 488

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1563

Gly Arg Glu Ala Ser Lys Met Ala Gln Thr Gln Gly Thr Arg Arg Lys  
1 5 10 15

Val Cys Tyr Tyr Tyr Asp Gly Asp Val Gly Asn Tyr Tyr Tyr Gly Gln  
20 25 30

Gly His Pro Met Lys Pro His Arg Ile Arg Met Thr His Asn Leu Leu  
35 40 45

Leu Asn Tyr Gly Leu Tyr Arg Lys Met Glu Ile Tyr Arg Pro His Lys  
50 55 60

Ala Asn Ala Glu Glu Met Thr Lys Tyr His Ser Asp Asp Tyr Ile Lys  
65 70 75 80

Phe Leu Arg Ser Ile Arg Pro Asp Asn Met Ser Glu Tyr Ser Lys Gln  
85 90 95

Met Gln Arg Phe Asn Val Gly Glu Asp Cys Pro Val Phe Asp Gly Leu  
100 105 110

Phe Glu Phe Cys Gln Leu Ser Thr Gly Gly Ser Val Ala Ser Ala Val  
115 120 125

Lys Leu Asn Lys Gln Gln Thr Asp Ile Ala Val Asn Trp Ala Gly Gly  
130 135 140

Leu His His Ala Lys Lys Ser Glu Ala Ser Gly Phe Cys Tyr Val Asn  
145 150 155 160

Asp Ile Val Leu Ala Ile Leu Glu Leu Lys Tyr His Gln Arg Val  
165 170 175

Leu Tyr Ile Asp Ile Asp Ile His His Gly Asp Gly Val Glu Glu Ala  
180 185 190

Phe Tyr Thr Thr Asp Arg Val Met Thr Val Ser Phe His Lys Tyr Gly  
195 200 205

Glu Tyr Phe Pro Gly Thr Gly Asp Leu Arg Asp Ile Gly Ala Gly Lys  
210 215 220

Gly Lys Tyr Tyr Ala Val Asn Tyr Pro Leu Arg Asp Gly Ile Asp Asp  
225 230 235 240

Glu Ser Tyr Glu Ala Ile Phe Lys Pro Val Met Ser Lys Val Met Glu

	245		250		255
Met Phe Gln Pro Ser Ala Val Val Leu Gln Cys Gly Ser Asp Ser Leu	260		265		270
Ser Gly Asp Arg Leu Gly Cys Phe Asn Leu Thr Ile Lys Gly His Ala	275		280		285
Lys Cys Val Glu Phe Val Lys Ser Phe Asn Leu Pro Met Leu Met Leu	290		295		300
Gly Gly Gly Gly Tyr Thr Ile Arg Asn Val Ala Arg Cys Trp Thr Tyr	305		310		315
Glu Thr Ala Val Ala Leu Asp Thr Glu Ile Pro Asn Glu Leu Pro Tyr	325		330		335
Asn Asp Tyr Phe Glu Tyr Phe Gly Pro Asp Phe Lys Leu His Ile Ser	340		345		350
Pro Ser Asn Met Thr Asn Gln Asn Thr Asn Glu Tyr Leu Glu Lys Ile	355		360		365
Lys Gln Arg Leu Phe Glu Asn Leu Arg Met Leu Pro His Ala Pro Gly	370		375		380
Val Gln Met Gln Ala Ile Pro Glu Asp Ala Ile Pro Glu Glu Ser Gly	385		390		395
Asp Glu Asp Glu Asp Asp Pro Asp Lys Arg Ile Ser Ile Cys Ser Ser	405		410		415
Asp Lys Arg Ile Ala Cys Glu Glu Glu Phe Ser Asp Ser Glu Glu Glu	420		425		430
Gly Glu Gly Gly Arg Lys Asn Ser Ser Asn Phe Lys Lys Ala Lys Arg	435		440		445
Val Lys Thr Glu Asp Glu Lys Glu Lys Asp Pro Glu Glu Lys Lys Glu	450		455		460
Val Thr Glu Glu Glu Lys Thr Lys Glu Glu Lys Pro Glu Ala Lys Gly	465		470		475
Val Lys Glu Glu Val Lys Leu Ala	485				

&lt;210&gt; 1564

&lt;211&gt; 197

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (155)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (178)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (179)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (187)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (189)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1564

Ala	Arg	Ser	Ser	Leu	Trp	Arg	Arg	Gln	Pro	Gly	Trp	Gln	Leu	Thr	Gly
1				5				10					15		

Gln	Pro	Gly	Ser	Ile	Leu	Leu	Arg	Val	Phe	Ser	Lys	Ser	Arg	Ala	Gly
			20				25						30		

Leu	Glu	Ala	Arg	Lys	Leu	Lys	Ala	Tyr	Arg	Thr	Met	Glu	Tyr	Met	Ala
		35					40					45			

Glu	Ser	Thr	Asp	Arg	Ser	Pro	Gly	His	Ile	Leu	Cys	Cys	Glu	Cys	Gly
	50					55					60				

Val	Pro	Ile	Ser	Pro	Asn	Pro	Ala	Asn	Ile	Cys	Val	Ala	Cys	Leu	Arg
65					70				75					80	

Ser	Lys	Val	Asp	Ile	Ser	Gln	Gly	Ile	Pro	Lys	Gln	Val	Ser	Ile	Ser
			85					90						95	

Phe	Cys	Lys	Gln	Cys	Gln	Arg	Tyr	Phe	Gln	Pro	Pro	Gly	Thr	Trp	Ile
		100						105					110		

Gln	Cys	Ala	Leu	Glu	Ser	Arg	Glu	Leu	Leu	Ala	Leu	Cys	Leu	Lys	Lys
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

115                                      120                                      125  
 Ile Lys Ala Pro Leu Ser Lys Val Arg Leu Val Asp Ala Gly Phe Val  
 130                                      135                                      140  
 Trp Thr Glu Pro His Ser Lys Arg Leu Lys Xaa Lys Leu Thr Ile Gln  
 145                                      150                                      155                                      160  
 Lys Glu Val Met Asn Gly Ala Ile Leu Gln Gln Val Phe Val Val Asp  
 165                                      170                                      175  
 Tyr Xaa Xaa Pro Lys Trp Gly Glu Met Ala Xaa Arg Xaa Leu Arg Ile  
 180                                      185                                      190  
 Leu Glu Arg Leu Asp  
 195

<210> 1565  
 <211> 197  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (179)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (189)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (190)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 1565  
 Met Gln Phe Ala Trp Gln Ser Tyr Lys Arg Tyr Ala Met Gly Lys Asn  
 1                                      5                                      10                                      15  
 Glu Leu Arg Pro Leu Thr Lys Asp Gly Tyr Glu Gly Asn Met Phe Gly  
 20                                      25                                      30  
 Gly Leu Ser Gly Ala Thr Val Ile Asp Ser Leu Asp Thr Leu Tyr Leu  
 35                                      40                                      45  
 Met Glu Leu Lys Glu Glu Phe Gln Glu Ala Lys Ala Trp Val Gly Glu  
 50                                      55                                      60

Ser Phe His Leu Asn Val Ser Gly Glu Ala Ser Leu Phe Glu Val Asn  
 65 70 75 80  
 Ile Arg Tyr Ile Gly Gly Leu Leu Ser Ala Phe Tyr Leu Thr Gly Glu  
 85 90 95  
 Glu Val Phe Arg Ile Lys Ala Ile Arg Leu Gly Glu Lys Leu Leu Pro  
 100 105 110  
 Ala Phe Asn Thr Pro Thr Gly Ile Pro Lys Gly Val Val Ser Phe Lys  
 115 120 125  
 Ser Gly Asn Trp Gly Trp Ala Thr Ala Gly Ser Ser Ser Ile Leu Ala  
 130 135 140  
 Glu Phe Gly Ser Leu His Leu Glu Phe Leu His Leu Thr Glu Leu Ser  
 145 150 155 160  
 Gly Asn Gln Val Phe Ala Glu Lys Val Arg Asn Ile Arg Lys Val Leu  
 165 170 175  
 Arg Lys Xaa Glu Lys Pro Phe Gly Leu Tyr Ser Asn Xaa Xaa Met Val  
 180 185 190  
 Leu Gln Thr Asp Pro  
 195

<210> 1566  
 <211> 240  
 <212> PRT  
 <213> Homo sapiens

<400> 1566  
 Ala Asp Pro Glu Gly Gln Ala Gly Arg Ala Gly Arg Ala Leu Arg Arg  
 1 5 10 15  
 His Gly His Leu His Glu Gly Ser Asp Arg Ala Gly Arg Arg Ala Val  
 20 25 30  
 Gln Arg Gly Ala Gln Pro Ala Leu Arg Gly Leu Gln Glu Arg Gly Arg  
 35 40 45  
 Gly Pro Gln Ser Ala Trp Arg Val Ile Ser Ser Ile Glu Gln Lys Thr  
 50 55 60  
 Asp Thr Ser Asp Lys Lys Leu Gln Leu Ile Lys Asp Tyr Arg Glu Lys  
 65 70 75 80



Glu Leu Ser Gly Ile Ile Asp Ser Xaa Phe Leu Ser Lys Cys Glu Asn  
           35                          40                          45  
 Lys Cys Lys Val Leu Gly Ile Asp Thr Glu Arg Pro Ile Leu Gln Val  
           50                          55                          60  
 Asp Ser Cys Val Phe Ala Gly Glu Tyr Glu Asp Thr Leu Gly Thr Cys  
           65                          70                          75                          80  
 Val Ile Phe Glu Glu Asn Val Glu His Ala Asp Thr Glu Gly Asn Asn  
                           85                          90                          95  
 Lys Thr Val Leu Lys Tyr Lys Cys His Thr Met Lys Lys Leu Ser Met  
                   100                          105                          110  
 Thr Arg Thr Leu Leu Thr Glu Lys Lys Glu Gly Glu Glu Asn Ile Gly  
           115                          120                          125  
 Gly Val Glu Trp Leu Gln Ile Lys Asp Asn Asp Phe Ser Tyr Arg Pro  
           130                          135                          140  
 Asn Met Ile Cys Asn Phe Leu His Glu Asn Glu Asp Glu Glu Val Val  
           145                          150                          155                          160  
 Ala Ser Ala Pro Asp Lys Ser Leu Glu Leu Glu Glu Glu Ile Gln  
                           165                          170                          175  
 Met Asn Asp Ser Ser Asn Leu Ser Cys Glu Gln Glu Lys Pro Met His  
           180                          185                          190  
 Leu Glu Ile Glu Asp Ser Gly Pro Leu Ile Asp Ile Pro Ser Glu Thr  
           195                          200                          205  
 Glu Gly Ser Val Phe Met Glu Thr Gln Met Leu Pro  
           210                          215                          220

&lt;210&gt; 1568

&lt;211&gt; 180

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (8)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE



<222> (12)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1568

Ala	Trp	Gln	Glu	Phe	Gly	Gln	Xaa	Pro	Gly	Ala	Xaa	Trp	Gln	Arg	Arg	
1				5					10					15		
Cys	Ala	Cys	Val	Val	Glu	Cys	Ser	Gly	Arg	Arg	Pro	Ala	Gly	Ala	Met	
			20					25					30			
Val	Phe	Leu	Thr	Ala	Gln	Leu	Trp	Leu	Arg	Asn	Arg	Val	Thr	Asp	Arg	
		35					40					45				
Tyr	Phe	Arg	Ile	Gln	Glu	Val	Leu	Lys	His	Ala	Arg	His	Phe	Arg	Gly	
	50					55					60					
Arg	Lys	Asn	Arg	Cys	Tyr	Arg	Leu	Ala	Val	Arg	Thr	Val	Ile	Arg	Ala	
	65				70					75					80	
Phe	Val	Lys	Cys	Thr	Lys	Ala	Arg	Tyr	Leu	Lys	Lys	Lys	Asn	Met	Arg	
				85					90					95		
Thr	Leu	Trp	Ile	Asn	Arg	Ile	Thr	Ala	Ala	Ser	Gln	Glu	His	Gly	Leu	
		100						105					110			
Lys	Tyr	Pro	Ala	Leu	Ile	Gly	Asn	Leu	Val	Lys	Cys	Gln	Val	Glu	Leu	
	115						120					125				
Asn	Arg	Lys	Val	Leu	Ala	Asp	Leu	Ala	Ile	Tyr	Glu	Pro	Lys	Thr	Phe	
	130					135					140					
Lys	Ser	Leu	Ala	Ala	Leu	Ala	Ser	Arg	Arg	Arg	His	Glu	Gly	Phe	Ala	
145					150					155					160	
Ala	Ala	Leu	Gly	Asp	Gly	Lys	Glu	Pro	Glu	Gly	Ile	Phe	Ser	Arg	Val	
			165					170						175		
Val	Gln	Tyr	His													
			180													

<210> 1569

<211> 160

<212> PRT

<213> Homo sapiens

<400> 1569

Ala	Gly	Pro	Tyr	Ala	Asp	Ser	Ile	Trp	Ala	Pro	Ala	Arg	Ser	Ala	Ala	
1				5					10					15		

Gly Gln Arg Gly Val Ala Met Ala Glu Leu Gln Gln Leu Arg Val Gln  
                   20                  25                  30  
 Glu Ala Val Glu Ser Met Val Lys Ser Leu Glu Arg Glu Asn Ile Arg  
                   35                  40                  45  
 Lys Met Gln Gly Leu Met Phe Arg Cys Ser Ala Ser Cys Cys Glu Asp  
                   50                  55                  60  
 Ser Gln Ala Ser Met Lys Gln Val His Gln Cys Ile Glu Arg Cys His  
                   65                  70                  75                  80  
 Val Pro Leu Ala Gln Ala Gln Ala Leu Val Thr Ser Glu Leu Glu Lys  
                   85                  90                  95  
 Phe Gln Asp Arg Leu Ala Arg Cys Thr Met His Cys Asn Asp Lys Ala  
                   100                  105                  110  
 Lys Asp Ser Ile Asp Ala Gly Ser Lys Glu Leu Gln Val Lys Gln Gln  
                   115                  120                  125  
 Leu Asp Ser Cys Val Thr Lys Cys Val Asp Asp His Met His Leu Ile  
                   130                  135                  140  
 Pro Thr Met Thr Lys Lys Met Lys Glu Ala Leu Leu Ser Ile Gly Lys  
                   145                  150                  155                  160

<210> 1570

<211> 77

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (13)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1570

Gly Leu Ser Asp His Leu Val Phe Pro Phe Ser Ala Xaa His Val Ser  
   1                  5                  10                  15  
 Arg Gly Val Ala Pro Tyr His Thr Ser Arg Ala Pro Glu Pro Tyr Phe  
                   20                  25                  30  
 Leu Ile Ser Ser Gly Leu Asp Phe Pro Val Leu His Gln Gln Leu Gln  
                   35                  40                  45

Tyr Pro Lys Leu Ser Ser Pro Ala Asp Pro Pro Ser Asn Gly Val Glu  
50 55 60

Thr Gly Gly Gln Cys Leu Val Cys Phe Leu Arg Asn Leu  
65 70 75

<210> 1571

<211> 218

<212> PRT

<213> Homo sapiens

<400> 1571

Glu Gly Pro Ile Pro Trp Gly Arg Arg Arg Arg Glu Pro Glu Pro Leu  
1 5 10 15

Leu Pro Met Ala Lys Lys Thr Tyr Asp Leu Leu Phe Lys Leu Leu Leu  
20 25 30

Ile Gly Asp Ser Gly Val Gly Lys Thr Cys Val Leu Phe Arg Phe Ser  
35 40 45

Asp Asp Ala Phe Asn Thr Thr Phe Ile Ser Thr Ile Gly Ile Asp Phe  
50 55 60

Lys Ile Lys Thr Val Glu Leu Gln Gly Lys Lys Ile Lys Leu Gln Ile  
65 70 75 80

Trp Asp Thr Ala Gly Gln Glu Arg Phe His Thr Ile Thr Thr Ser Tyr  
85 90 95

Tyr Arg Gly Ala Met Gly Ile Met Leu Val Tyr Asp Ile Thr Asn Gly  
100 105 110

Lys Ser Phe Glu Asn Ile Ser Lys Trp Leu Arg Asn Ile Asp Glu His  
115 120 125

Ala Asn Glu Asp Val Glu Arg Met Leu Leu Gly Asn Lys Cys Asp Met  
130 135 140

Asp Asp Lys Arg Val Val Pro Lys Gly Lys Gly Glu Gln Ile Ala Arg  
145 150 155 160

Glu His Gly Ile Arg Phe Phe Glu Thr Ser Ala Lys Ala Asn Ile Asn  
165 170 175

Ile Glu Lys Ala Phe Leu Thr Leu Ala Glu Asp Ile Leu Arg Lys Thr  
180 185 190

Pro Val Lys Glu Pro Asn Ser Glu Asn Val Asp Ile Ser Ser Gly Gly  
 195 200 205

Gly Val Thr Gly Trp Lys Ser Lys Cys Cys  
 210 215

<210> 1572

<211> 265

<212> PRT

<213> Homo sapiens

<400> 1572

Arg Asn Leu Leu Ala Trp Pro Arg Arg Leu Ser Gly Ile Ala Arg Ala  
 1 5 10 15

Leu Arg Phe Ile Ala Thr Pro Arg Leu Ser Ala Met Pro His Ile Asp  
 20 25 30

Asn Asp Val Lys Leu Asp Phe Lys Asp Val Leu Leu Arg Pro Lys Arg  
 35 40 45

Ser Thr Leu Lys Ser Arg Ser Glu Val Asp Leu Thr Arg Ser Phe Ser  
 50 55 60

Phe Arg Asn Ser Lys Gln Thr Tyr Ser Gly Val Pro Ile Ile Ala Ala  
 65 70 75 80

Asn Met Asp Thr Val Gly Thr Phe Glu Met Ala Lys Val Leu Cys Lys  
 85 90 95

Phe Ser Leu Phe Thr Ala Val His Lys His Tyr Ser Leu Val Gln Trp  
 100 105 110

Gln Glu Phe Ala Gly Gln Asn Pro Asp Cys Leu Glu His Leu Ala Ala  
 115 120 125

Ser Ser Gly Thr Gly Ser Ser Asp Phe Glu Gln Leu Glu Gln Ile Leu  
 130 135 140

Glu Ala Ile Pro Gln Val Lys Tyr Ile Cys Leu Asp Val Ala Asn Gly  
 145 150 155 160

Tyr Ser Glu His Phe Val Glu Phe Val Lys Asp Val Arg Lys Arg Phe  
 165 170 175

Pro Gln His Thr Ile Met Ala Gly Asn Val Val Thr Gly Glu Met Val  
 180 185 190

Glu Glu Leu Ile Leu Ser Gly Ala Asp Ile Ile Lys Val Gly Ile Gly

195 200 205  
Pro Gly Ser Val Cys Thr Thr Arg Lys Lys Thr Gly Val Gly Tyr Pro  
210 215 220  
Gln Leu Ser Ala Val Met Glu Cys Ala Asp Ala Ala His Gly Leu Lys  
225 230 235 240  
Gly Thr Ser Phe Gln Met Glu Val Ala Ala Val Leu Gly Met Trp Pro  
245 250 255  
Arg Leu Leu Gly Gln Glu Leu Thr Ser  
260 265

<210> 1573  
<211> 128  
<212> PRT  
<213> Homo sapiens

<400> 1573  
Glu Thr Thr Thr Thr Leu Trp Arg Arg Asn Ala Asn Gly Asp Pro  
1 5 10 15  
Val Cys Asn Ala Cys Gly Leu Tyr Tyr Lys Leu His Asn Val Asn Arg  
20 25 30  
Pro Leu Thr Met Lys Lys Glu Gly Ile Gln Thr Arg Asn Arg Lys Met  
35 40 45  
Ser Asn Lys Ser Lys Lys Ser Lys Lys Gly Ala Glu Cys Phe Glu Glu  
50 55 60  
Leu Ser Lys Cys Met Gln Glu Lys Ser Ser Pro Phe Ser Ala Ala Ala  
65 70 75 80  
Leu Ala Gly His Met Ala Pro Val Gly His Leu Pro Pro Phe Ser His  
85 90 95  
Ser Gly His Ile Leu Pro Thr Pro Thr Pro Ile His Pro Ser Ser Ser  
100 105 110  
Leu Ser Phe Gly His Pro His Pro Ser Ser Met Val Thr Ala Met Gly  
115 120 125

<210> 1574

<211> 334

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (4)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1574

Gly Ala Arg Xaa Asp Arg Ala Leu Leu Arg Pro Pro Leu Leu Arg Glu  
1 5 10 15

Leu Thr Pro Arg Ser Pro Arg Pro Pro Leu Ala Pro Ala Ala Arg Pro  
20 25 30

Ser Trp Pro Cys Leu Cys Leu Asp Gly Gly Val Ser Gly Val Phe Val  
35 40 45

Trp Asp Glu Glu Arg Ile Gln Glu Glu Glu Leu Gln Arg Ser Ile Asn  
50 55 60

Glu Met Lys Arg Leu Glu Glu Met Ser Asn Met Phe Gln Ser Ser Gly  
65 70 75 80

Val Gln His His Pro Pro Glu Pro Lys Ala Gln Thr Glu Gly Asn Glu  
85 90 95

Asp Ser Glu Gly Lys Glu Gln Arg Trp Glu Met Val Met Asp Lys Lys  
100 105 110

His Phe Lys Leu Trp Arg Arg Pro Ile Thr Gly Thr His Leu Tyr Gln  
115 120 125

Tyr Arg Val Phe Gly Thr Tyr Thr Asp Val Thr Pro Arg Gln Phe Phe  
130 135 140

Asn Val Gln Leu Asp Thr Glu Tyr Arg Lys Lys Trp Asp Ala Leu Val  
145 150 155 160

Ile Lys Leu Glu Val Ile Glu Arg Asp Val Val Ser Gly Ser Glu Val  
165 170 175

Leu His Trp Val Thr His Phe Pro Tyr Pro Met Tyr Ser Arg Asp Tyr  
180 185 190

Val Tyr Val Arg Arg Tyr Ser Val Asp Gln Glu Asn Asn Met Met Val  
195 200 205

Leu Val Ser Arg Ala Val Glu His Pro Ser Val Pro Glu Ser Pro Glu

210 215 220

Phe Val Arg Val Arg Ser Tyr Glu Ser Gln Met Val Ile Arg Pro His  
225 230 235 240

Lys Ser Phe Asp Glu Asn Gly Phe Asp Tyr Leu Leu Thr Tyr Ser Asp  
245 250 255

Asn Pro Gln Thr Val Phe Pro Arg Tyr Cys Val Ser Trp Met Val Ser  
260 265 270

Ser Gly Met Pro Asp Phe Leu Glu Lys Leu His Met Ala Thr Leu Lys  
275 280 285

Ala Lys Asn Met Glu Ile Lys Val Lys Asp Tyr Ile Ser Ala Lys Pro  
290 295 300

Leu Glu Met Ser Ser Glu Ala Lys Ala Thr Ser Gln Ser Ser Glu Arg  
305 310 315 320

Lys Asn Glu Gly Ser Cys Gly Pro Ala Arg Ile Glu Tyr Ala  
325 330

<210> 1575

<211> 335

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (125)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (218)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (219)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (268)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1575

Pro Ser Ala Pro Arg Ala Leu Thr Leu Gln Arg Arg Lys Ile Gly Arg  
 1 5 10 15  
 Arg Gly Gln Ala Leu Met Leu Val Ser Gly Arg Arg Arg Leu Leu Thr  
 20 25 30  
 Val Leu Leu Gln Ala Gln Lys Trp Pro Phe Gln Pro Ser Arg Asp Met  
 35 40 45  
 Arg Leu Val Gln Phe Arg Ala Pro His Leu Val Gly Pro His Leu Gly  
 50 55 60  
 Leu Glu Thr Gly Asn Gly Gly Gly Val Ile Asn Leu Asn Ala Phe Asp  
 65 70 75 80  
 Pro Thr Leu Pro Lys Thr Met Thr Gln Phe Leu Glu Gln Gly Glu Ala  
 85 90 95  
 Thr Leu Ser Val Ala Arg Arg Ala Leu Ala Ala Gln Leu Pro Val Leu  
 100 105 110  
 Pro Arg Ser Glu Val Thr Phe Leu Ala Pro Val Thr Xaa Pro Asp Lys  
 115 120 125  
 Val Val Cys Val Gly Met Asn Tyr Val Asp His Cys Lys Glu Gln Asn  
 130 135 140  
 Val Pro Val Pro Lys Glu Pro Ile Ile Phe Ser Lys Phe Ala Ser Ser  
 145 150 155 160  
 Ile Val Gly Pro Tyr Asp Glu Val Val Leu Pro Pro Gln Ser Gln Glu  
 165 170 175  
 Val Asp Trp Glu Val Glu Leu Ala Val Val Ile Gly Lys Lys Gly Lys  
 180 185 190  
 His Ile Lys Ala Thr Asp Ala Met Ala His Val Ala Gly Phe Thr Val  
 195 200 205  
 Ala His Asp Val Ser Ala Arg Asp Trp Xaa Xaa Arg Arg Asn Gly Lys  
 210 215 220  
 Gln Trp Leu Leu Gly Lys Thr Phe Asp Thr Phe Cys Pro Leu Gly Pro  
 225 230 235 240  
 Ala Leu Val Thr Lys Asp Ser Val Ala Asp Pro His Asn Leu Lys Ile  
 245 250 255  
 Cys Cys Arg Val Asn Gly Glu Val Val Gln Ser Xaa Asn Thr Asn Gln  
 260 265 270



Met Val Phe Lys Thr Glu Asp Leu Ile Ala Trp Val Ser Gln Phe Val  
 275 280 285

Thr Phe Tyr Pro Gly Asp Val Ile Leu Thr Gly Thr Pro Pro Gly Val  
 290 295 300

Gly Val Phe Arg Lys Pro Pro Val Phe Leu Lys Lys Gly Asp Glu Val  
 305 310 315 320

Gln Cys Glu Ile Glu Glu Leu Gly Val Ile Ile Asn Lys Val Val  
 325 330 335

<210> 1576  
 <211> 113  
 <212> PRT  
 <213> Homo sapiens

<400> 1576  
 Ile Pro Glu Asp Pro His Ile Asp Glu Ser Lys Ala Lys His Gln Ala  
 1 5 10 15

Ile Ile Met Ser Thr Ser Leu Arg Val Ser Pro Ser Ile His Gly Tyr  
 20 25 30

His Phe Asp Thr Ala Ser Arg Lys Lys Ala Val Gly Asn Ile Phe Glu  
 35 40 45

Asn Thr Asp Gln Glu Ser Leu Glu Arg Leu Phe Arg Asn Ser Gly Asp  
 50 55 60

Lys Lys Ala Glu Glu Arg Ala Lys Ile Ile Phe Ala Ile Asp Gln Asp  
 65 70 75 80

Val Glu Glu Lys Thr Arg Ala Leu Met Ala Leu Lys Lys Arg Thr Lys  
 85 90 95

Asp Lys Leu Phe Gln Phe Leu Lys Leu Arg Lys Tyr Ser Ile Lys Val  
 100 105 110

His

<210> 1577  
 <211> 212  
 <212> PRT  
 <213> Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (5)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1577

Gly Ala Ser Trp Xaa Ala Leu Thr Ala Ala Ser Ala Pro Gly Pro Trp  
1 5 10 15

Pro Leu Ser Gly Met Ala Cys Gly Ala Thr Leu Lys Arg Pro Met Glu  
20 25 30

Phe Glu Ala Ala Leu Leu Ser Pro Gly Ser Pro Lys Arg Arg Arg Cys  
35 40 45

Ala Pro Leu Pro Gly Pro Thr Pro Gly Leu Arg Pro Pro Asp Ala Glu  
50 55 60

Pro Pro Pro Pro Phe Gln Thr Gln Thr Pro Pro Gln Ser Leu Gln Gln  
65 70 75 80

Pro Ala Pro Pro Gly Ser Glu Arg Arg Leu Pro Thr Pro Glu Gln Ile  
85 90 95

Phe Gln Asn Ile Lys Gln Glu Tyr Ser Arg Tyr Gln Arg Trp Arg His  
100 105 110

Leu Glu Val Val Leu Asn Gln Ser Glu Ala Cys Ala Ser Glu Ser Gln  
115 120 125

Pro His Ser Ser Ala Leu Thr Ala Pro Ser Ser Pro Gly Ser Ser Trp  
130 135 140

Met Lys Lys Asp Gln Pro Thr Phe Thr Leu Arg Gln Val Gly Ile Ile  
145 150 155 160

Cys Glu Arg Leu Leu Lys Asp Tyr Glu Asp Lys Ile Arg Glu Glu Tyr  
165 170 175

Glu Gln Ile Leu Asn Thr Lys Leu Ala Glu Gln Tyr Glu Ser Phe Val  
180 185 190

Lys Phe Thr His Asp Gln Ile Met Arg Arg Tyr Gly Thr Arg Pro Thr  
195 200 205

Ser Tyr Val Ser  
210

&lt;210&gt; 1578

&lt;211&gt; 393

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (209)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1578

Arg	Arg	Arg	Arg	Glu	Ala	Gln	Glu	Lys	Arg	Tyr	Tyr	Tyr	Asp	Leu	Asp
1				5				10						15	
Asp	Ser	Tyr	Asp	Glu	Ser	Asp	Glu	Glu	Glu	Val	Arg	Ala	His	Leu	Arg
			20					25						30	
Cys	Val	Ala	Glu	Gln	Pro	Pro	Leu	Lys	Leu	Asp	Thr	Ser	Ser	Glu	Lys
			35				40						45		
Leu	Glu	Phe	Leu	Gln	Leu	Phe	Gly	Leu	Thr	Thr	Gln	Gln	Gln	Lys	Glu
	50					55					60				
Glu	Leu	Val	Ala	Gln	Lys	Arg	Arg	Lys	Arg	Arg	Arg	Met	Leu	Arg	Glu
65					70				75						80
Arg	Ser	Pro	Ser	Pro	Pro	Thr	Ile	Gln	Ser	Lys	Arg	Gln	Thr	Pro	Ser
					85				90					95	
Pro	Arg	Leu	Ala	Leu	Ser	Thr	Arg	Tyr	Ser	Pro	Asp	Glu	Met	Asn	Asn
		100						105					110		
Ser	Pro	Asn	Phe	Glu	Glu	Lys	Lys	Lys	Phe	Leu	Thr	Ile	Phe	Asn	Leu
		115					120					125			
Thr	His	Ile	Ser	Ala	Glu	Lys	Arg	Lys	Asp	Lys	Glu	Arg	Leu	Val	Glu
	130					135					140				
Met	Leu	Arg	Ala	Met	Lys	Gln	Lys	Ala	Leu	Ser	Ala	Ala	Val	Ala	Asp
145					150					155					160
Ser	Leu	Thr	Asn	Ser	Pro	Arg	Asp	Ser	Pro	Ala	Val	Ser	Leu	Ser	Glu
				165					170					175	
Pro	Ala	Thr	Gln	Gln	Ala	Ser	Leu	Asp	Val	Glu	Lys	Pro	Val	Gly	Val
			180					185					190		
Ala	Ala	Ser	Leu	Ser	Asp	Ile	Pro	Lys	Ala	Ala	Asp	Leu	Gly	Ser	Trp
		195					200					205			
Xaa	Gln	Val	Arg	Pro	Gln	Glu	Leu	Ser	Arg	Val	Gln	Glu	Leu	Ala	Pro
	210					215						220			

Ala Ser Gly Glu Lys Gly Gln Ala Glu Arg Gly Pro Trp Arg Gln Lys  
225 230 235 240

Glu Ser Glu His Ala Ser Leu Tyr Pro Gly Arg Cys Thr Gln Gly His  
245 250 255

Ser Cys Ala Ala Val Pro Gln His Gln Trp Glu Glu Gln Ala Val Gly  
260 265 270

Ala Leu Cys Gly Arg Arg Val Cys Thr Ser Val Pro Arg Val Gln Cys  
275 280 285

Cys Ser Pro Pro Arg Arg Pro Cys Arg Ser Ile Lys Gly Ala Trp Leu  
290 295 300

Cys Cys Leu Gln Ser Arg Thr Thr Arg Leu Thr Arg Pro Ser Thr Thr  
305 310 315 320

Thr Phe Leu Ser Cys Ser Pro Pro Ala Ala Pro Leu His Pro Ser Thr  
325 330 335

Met Gly Ser Arg Ser Pro Pro Leu Gln Gly Arg Ala Pro Gln Pro Arg  
340 345 350

Ser Trp Thr Gly Thr Arg Arg Arg Arg Lys Arg Arg Met Met Lys Met  
355 360 365

Glu Lys Met Arg Arg Lys Ser Pro Ser Ala Ser Gly Lys Gly Ser Arg  
370 375 380

Pro Phe Leu Lys Leu Thr Arg Asn Thr  
385 390

<210> 1579

<211> 39

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (3)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (10)

<223> Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1579

Gln Ala Xaa Thr Thr Leu Thr Lys Gly Xaa Lys Ser Trp Ser Ser Thr  
1 5 10 15

Ala Val Ala Ala Ala Leu Glu Leu Val Asp Pro Pro Gly Cys Arg Asn  
20 25 30

Ser Ala Arg Gly Arg Arg Asn  
35

&lt;210&gt; 1580

&lt;211&gt; 286

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (171)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (237)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1580

Pro Thr Arg Pro Pro Thr Arg Pro Pro Thr Arg Pro Val Pro Ala Ser  
1 5 10 15

Glu Ser Ala Val Val Val Gln Thr Glu Cys Ser Leu Leu Phe Val Trp  
20 25 30

Leu Arg Phe His Ala Arg Arg Trp Leu Arg Met Ser Ser Ser His Phe  
35 40 45

Ala Ser Arg His Arg Lys Asp Ile Ser Thr Glu Met Ile Arg Thr Lys  
50 55 60

Ile Ala His Arg Lys Ser Leu Ser Gln Lys Glu Asn Arg His Lys Glu  
65 70 75 80

Tyr Glu Arg Asn Arg His Phe Gly Leu Lys Asp Val Asn Ile Pro Thr  
85 90 95

Leu Glu Gly Arg Ile Leu Val Glu Leu Asp Glu Thr Ser Gln Gly Leu  
100 105 110

Val Pro Glu Lys Thr Asn Val Lys Pro Arg Ala Met Lys Thr Ile Leu  
115 120 125

Gly Asp Gln Arg Lys Gln Met Leu Gln Lys Tyr Lys Glu Glu Lys Gln  
 130 135 140  
 Leu Gln Lys Leu Lys Glu Gln Arg Glu Lys Ala Lys Arg Gly Ile Phe  
 145 150 155 160  
 Lys Val Gly Arg Tyr Arg Pro Asp Met Pro Xaa Phe Leu Leu Ser Asn  
 165 170 175  
 Gln Asn Ala Val Lys Ala Glu Pro Lys Lys Ala Ile Pro Ser Ser Val  
 180 185 190  
 Arg Ile Thr Arg Ser Lys Ala Lys Asp Gln Met Glu Gln Thr Lys Ile  
 195 200 205  
 Asp Asn Glu Ser Asp Val Arg Ala Ile Arg Pro Gly Pro Arg Gln Thr  
 210 215 220  
 Ser Glu Lys Lys Val Ser Asp Lys Glu Lys Lys Val Xaa Gln Pro Val  
 225 230 235 240  
 Met Pro Thr Ser Leu Arg Met Thr Arg Ser Ala Thr Gln Ala Ala Lys  
 245 250 255  
 Gln Val Pro Arg Thr Val Ser Ser Thr Thr Ala Arg Lys Pro Val Thr  
 260 265 270  
 Arg Ala Ala Asn Glu Asn Gly Thr Arg Arg Lys Gly Ala Lys  
 275 280 285

&lt;210&gt; 1581

&lt;211&gt; 276

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1581

Asp Arg Arg Gly Ile Gly Ile Met Ala Ala Ala Leu Phe Val Leu Leu  
 1 5 10 15

Gly Phe Ala Leu Leu Gly Thr His Gly Ala Ser Gly Ala Ala Gly Thr  
 20 25 30

Val Phe Thr Thr Val Glu Asp Leu Gly Ser Lys Ile Leu Leu Thr Cys  
 35 40 45

Ser Leu Asn Asp Ser Ala Thr Glu Val Thr Gly His Arg Trp Leu Lys  
 50 55 60

&lt;222&gt; (554)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1583

Gly Xaa Lys Ser Trp Cys Ser Thr Ala Val Ala Ala Ala Leu Glu Leu  
 1 5 10 15

Val Asp Pro Pro Gly Cys Arg Asn Ser Ala Arg Val Leu Ala Val Val  
 20 25 30

Ala Xaa Val Leu Lys Leu Gly Asn Ile Glu Phe Lys Pro Glu Ser Arg  
 35 40 45

Val Asn Gly Leu Asp Glu Ser Lys Ile Lys Asp Lys Asn Glu Leu Lys  
 50 55 60

Glu Ile Cys Glu Leu Thr Gly Ile Asp Gln Ser Val Leu Glu Arg Ala  
 65 70 75 80

Phe Ser Phe Arg Thr Val Glu Ala Lys Gln Glu Lys Val Ser Thr Thr  
 85 90 95

Leu Asn Val Ala Gln Ala Tyr Tyr Ala Arg Asp Ala Leu Ala Lys Asn  
 100 105 110

Leu Tyr Ser Arg Leu Phe Ser Trp Leu Val Asn Arg Ile Asn Glu Ser  
 115 120 125

Ile Lys Ala Gln Thr Lys Val Arg Lys Lys Val Met Gly Val Leu Asp  
 130 135 140

Ile Tyr Gly Phe Glu Ile Phe Glu Asp Asn Ser Phe Glu Gln Phe Ile  
 145 150 155 160

Ile Asn Tyr Cys Asn Glu Lys Leu Gln Gln Ile Phe Ile Glu Leu Thr  
 165 170 175

Leu Lys Glu Glu Gln Glu Glu Tyr Ile Arg Glu Xaa Ile Glu Trp Thr  
 180 185 190

His Ile Asp Tyr Phe Asn Asn Ala Ile Ile Cys Asp Leu Ile Glu Asn  
 195 200 205

Asn Thr Asn Gly Ile Leu Ala Met Leu Asp Glu Glu Cys Leu Arg Pro  
 210 215 220

Gly Thr Val Thr Asp Glu Thr Phe Leu Glu Lys Leu Asn Gln Val Cys  
 225 230 235 240

Ala Thr His Gln His Phe Glu Ser Arg Met Ser Lys Cys Ser Arg Phe  
 245 250 255

Leu Asn Asp Thr Ser Leu Pro His Ser Cys Phe Arg Ile Gln His Tyr  
260 265 270

Ala Gly Lys Val Leu Tyr Gln Val Glu Gly Phe Val Asp Lys Asn Asn  
275 280 285

Asp Leu Xaa Tyr Arg Asp Leu Ser Gln Ala Met Trp Lys Ala Ser His  
290 295 300

Ala Leu Ile Lys Ser Leu Phe Pro Glu Gly Asn Pro Ala Lys Ile Asn  
305 310 315 320

Leu Lys Arg Pro Pro Thr Ala Gly Ser Gln Phe Lys Ala Ser Val Ala  
325 330 335

Thr Leu Met Lys Asn Leu Gln Thr Xaa Xaa Pro Asn Tyr Ile Arg Cys  
340 345 350

Ile Lys Pro Asn Asp Lys Lys Ala Ala His Ile Phe Asn Glu Ala Leu  
355 360 365

Val Cys His Gln Ile Arg Tyr Leu Gly Leu Leu Glu Asn Val Arg Val  
370 375 380

Arg Arg Ala Gly Tyr Ala Phe Arg Gln Ala Tyr Glu Pro Cys Leu Glu  
385 390 395 400

Arg Tyr Lys Met Leu Cys Lys Gln Thr Trp Pro His Trp Lys Gly Pro  
405 410 415

Ala Arg Ser Gly Val Glu Val Leu Phe Asn Glu Leu Glu Ile Pro Val  
420 425 430

Glu Glu Tyr Ser Phe Gly Arg Ser Lys Ile Phe Ile Arg Asn Pro Arg  
435 440 445

Thr Leu Phe Lys Leu Glu Asp Leu Arg Lys Gln Arg Leu Glu Asp Leu  
450 455 460

Ala Thr Leu Ile Gln Lys Ile Tyr Arg Gly Trp Lys Cys Arg Thr His  
465 470 475 480

Phe Leu Leu Met Lys Lys Ser Gln Ile Val Ile Ala Ala Trp Tyr Arg  
485 490 495

Arg Tyr Ala Gln Gln Lys Arg Tyr Gln Gln Thr Lys Ser Ser Ala Leu  
500 505 510

Val Ile Gln Ser Tyr Ile Arg Gly Trp Lys Ala Arg Lys Ile Leu Arg  
515 520 525



Glu Leu Lys His Gln Lys Arg Cys Lys Glu Ala Val Thr Thr Ile Ala  
 530 535 540

Ala Tyr Trp His Gly Thr Gln Xaa Xaa Xaa Lys Asn Gln Glu Ile Leu  
 545 550 555 560

Gln Ser Gln Cys Trp Lys Arg Lys Ser  
 565

<210> 1584

<211> 267

<212> PRT

<213> Homo sapiens

<400> 1584

Arg Val Asp Pro Arg Val Arg Ile Leu Gly Ala Gly Glu Glu Ala Gly  
 1 5 10 15

Ser Pro Ser Leu His Val Arg Asp Leu Thr Val Glu Met Ala Ala Gln  
 20 25 30

Lys Ile Asn Glu Gly Leu Glu His Leu Ala Lys Ala Glu Lys Tyr Leu  
 35 40 45

Lys Thr Gly Phe Leu Lys Trp Lys Pro Asp Tyr Asp Ser Ala Ala Ser  
 50 55 60

Glu Tyr Gly Lys Ala Ala Val Ala Phe Lys Asn Ala Lys Gln Phe Glu  
 65 70 75 80

Gln Ala Lys Asp Ala Cys Leu Arg Glu Ala Val Ala His Glu Asn Asn  
 85 90 95

Arg Ala Leu Phe His Ala Ala Lys Ala Tyr Glu Gln Ala Gly Met Met  
 100 105 110

Leu Lys Glu Met Gln Lys Leu Pro Glu Ala Val Gln Leu Ile Glu Lys  
 115 120 125

Ala Ser Met Met Tyr Leu Glu Asn Gly Thr Pro Asp Thr Ala Ala Met  
 130 135 140

Ala Leu Glu Arg Ala Gly Lys Leu Ile Glu Asn Val Asp Pro Glu Lys  
 145 150 155 160

Ala Val Gln Leu Tyr Gln Gln Thr Ala Asn Val Phe Glu Asn Glu Glu  
 165 170 175

Arg Leu Arg Gln Ala Val Glu Leu Leu Gly Lys Ala Ser Arg Leu Leu  
180 185 190

Val Arg Gly Arg Arg Phe Asp Glu Ala Ala Leu Ser Ile Gln Lys Glu  
195 200 205

Lys Asn Ile Tyr Lys Glu Ile Glu Asn Tyr Pro Thr Cys Tyr Lys Lys  
210 215 220

Thr Ile Ala Gln Val Leu Val His Leu His Arg Asn Asp Tyr Val Ala  
225 230 235 240

Ala Glu Arg Cys Val Arg Glu Ser Tyr Ser Ile Pro Gly Phe Asn Gly  
245 250 255

Ser Glu Asp Cys Ala Ala Leu Gly Thr Ala Ser  
260 265

<210> 1585

<211> 214

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (1)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (2)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (3)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (12)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1585

Xaa Xaa Xaa Gln Thr Ser Pro Val Leu Cys Asn Xaa Pro Arg Arg His  
1 5 10 15

Arg Ala Pro Trp Pro Ser Tyr Asn Asp Glu Asp Ile Tyr Leu Phe Asn  
20 25 30

Ser Ser His Ser Asp Gly Ala Gln Tyr Val Lys Arg Tyr Lys Gly His  
35 40 45

Arg Asn Asn Ala Thr Val Lys Gly Val Asn Phe Tyr Gly Pro Lys Ser  
50 55 60

Glu Phe Val Val Ser Gly Ser Asp Cys Gly His Ile Phe Leu Trp Glu  
65 70 75 80

Lys Ser Ser Cys Gln Ile Ile Gln Phe Met Glu Gly Asp Lys Gly Gly  
85 90 95

Val Val Asn Cys Leu Glu Pro His Pro His Leu Pro Val Leu Ala Thr  
100 105 110

Ser Gly Leu Asp His Asp Val Lys Ile Trp Ala Pro Thr Ala Glu Ala  
115 120 125

Ser Thr Glu Leu Thr Gly Leu Lys Asp Val Ile Lys Lys Asn Lys Arg  
130 135 140

Glu Arg Asp Glu Asp Ser Leu His Gln Thr Asp Leu Phe Asp Ser His  
145 150 155 160

Met Leu Trp Phe Leu Met His His Leu Arg Gln Arg Arg His His Arg  
165 170 175

Arg Trp Arg Glu Pro Gly Val Gly Ala Thr Asp Ala Asp Ser Asp Glu  
180 185 190

Ser Pro Ser Ser Ser Asp Thr Ser Asp Glu Glu Glu Gly Pro Asp Arg  
195 200 205

Val Gln Cys Met Pro Ser  
210

<210> 1586

<211> 74

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (7)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1586

Gln Ile Thr Pro Asn Lys Xaa Gly His Arg Glu Ser Ala Arg Arg Pro

1                      5                      10                      15  
 Val Ile Gln Gly Pro Phe Leu Leu Asp Val Lys Glu Ser Trp Val Lys  
                     20                      25                      30  
 Cys Gly Cys Asn Leu Asn Gln Leu Val Leu Val Ile Cys Phe Cys Pro  
                     35                      40                      45  
 Leu Cys Phe Leu Leu Ser Asn Ala Lys Cys Val Phe Cys Ser His Glu  
                     50                      55                      60  
 Leu Lys His Lys Lys Met His Glu Thr Leu  
                     65                      70

&lt;210&gt; 1587

&lt;211&gt; 412

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (296)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1587

Ser Gly Thr His His Phe Ser Cys Val Leu Gly Ser Phe Arg Val Ser  
 1                      5                      10                      15  
 Ala Met Phe Pro Arg Val Ser Thr Phe Leu Pro Leu Arg Pro Leu Ser  
                     20                      25                      30  
 Arg His Pro Leu Ser Ser Gly Ser Pro Glu Thr Ser Ala Ala Ala Ile  
                     35                      40                      45  
 Met Leu Leu Thr Val Arg His Gly Thr Val Arg Tyr Arg Ser Ser Ala  
                     50                      55                      60  
 Leu Leu Ala Arg Thr Lys Asn Asn Ile Gln Arg Tyr Phe Gly Thr Asn  
                     65                      70                      75                      80  
 Ser Val Ile Cys Ser Lys Lys Asp Lys Gln Ser Val Arg Thr Glu Glu  
                     85                      90                      95  
 Thr Ser Lys Glu Thr Ser Glu Ser Gln Asp Ser Glu Lys Glu Asn Thr  
                     100                      105                      110  
 Lys Lys Asp Leu Leu Gly Ile Ile Lys Gly Met Lys Val Glu Leu Ser  
                     115                      120                      125

Thr Val Asn Val Arg Thr Thr Lys Pro Pro Lys Arg Arg Pro Leu Lys  
 130 135 140  
 Ser Leu Glu Ala Thr Leu Gly Arg Leu Arg Arg Ala Thr Glu Tyr Ala  
 145 150 155 160  
 Pro Lys Lys Arg Ile Glu Pro Leu Ser Pro Glu Leu Val Ala Ala Ala  
 165 170 175  
 Ser Ala Val Ala Asp Ser Leu Pro Phe Asp Lys Gln Thr Thr Lys Ser  
 180 185 190  
 Glu Leu Leu Ser Gln Leu Gln Gln His Glu Glu Glu Ser Arg Ala Gln  
 195 200 205  
 Arg Asp Ala Lys Arg Pro Lys Ile Ser Phe Ser Asn Ile Ile Ser Asp  
 210 215 220  
 Met Lys Val Ala Arg Ser Ala Thr Ala Arg Val Arg Ser Arg Pro Glu  
 225 230 235 240  
 Leu Arg Ile Gln Phe Asp Glu Gly Tyr Asp Asn Tyr Pro Gly Gln Glu  
 245 250 255  
 Lys Thr Asp Asp Leu Lys Lys Arg Lys Asn Ile Phe Thr Gly Lys Arg  
 260 265 270  
 Leu Asn Ile Phe Asp Met Met Ala Val Thr Lys Glu Ala Pro Glu Thr  
 275 280 285  
 Asp Thr Ser Pro Ser Leu Trp Xaa Val Glu Phe Ala Lys Gln Leu Ala  
 290 295 300  
 Thr Val Asn Glu Gln Pro Leu Gln Asn Gly Phe Glu Glu Leu Ile Gln  
 305 310 315 320  
 Trp Thr Lys Glu Gly Lys Leu Trp Glu Phe Pro Ile Asn Asn Glu Ala  
 325 330 335  
 Gly Phe Asp Asp Asp Gly Ser Glu Phe His Glu His Ile Phe Leu Glu  
 340 345 350  
 Lys His Leu Glu Ser Phe Pro Lys Gln Gly Pro Ile Arg His Phe Met  
 355 360 365  
 Glu Leu Val Thr Cys Gly Leu Ser Lys Asn Pro Tyr Leu Ser Val Lys  
 370 375 380  
 Gln Lys Val Glu His Ile Glu Trp Phe Arg Asn Tyr Phe Asn Glu Lys  
 385 390 395 400

Lys Asp Ile Leu Lys Glu Ser Asn Ile Gln Phe Asn  
405 410

<210> 1588  
<211> 44  
<212> PRT  
<213> Homo sapiens

<400> 1588  
Ala Ile His Ser Leu Gln Gln Phe Asp Lys Ile Tyr Phe Cys Glu Gln  
1 5 10 15

Lys Leu Arg His Leu His Phe Leu Pro Met Trp Ser Leu Gln Thr Trp  
20 25 30

Glu Thr Ile His Glu Tyr Leu Tyr Cys Met Val Ile  
35 40

<210> 1589  
<211> 214  
<212> PRT  
<213> Homo sapiens

<400> 1589  
Val Gly Glu Thr Gln His Ala Leu Arg Pro Leu Cys Lys Gln His Pro  
1 5 10 15

Val Pro Pro Ser Ser Pro Arg Pro Ser Glu Glu Met Val Lys Met Val  
20 25 30

Leu Ser Arg Pro Cys His Pro Asp Asp Gln Phe Thr Thr Ser Ile Leu  
35 40 45

Arg His Trp Cys Met Lys His Asp Glu Leu Leu Ala Glu His Ile Lys  
50 55 60

Ser Leu Leu Ile Lys Asn Asn Ser Leu Pro Arg Lys Arg Gln Ser Leu  
65 70 75 80

Arg Ser Ser Ser Ser Lys Leu Ala Gln Leu Thr Leu Glu Gln Ile Leu  
85 90 95

Glu His Leu Asp Asn Leu Arg Leu Asn Leu Thr Asn Thr Lys Gln Asn  
100 105 110

Phe Phe Ser Gln Thr Pro Ile Leu Gln Ala Leu Gln His Val Gln Ala  
115 120 125

Ser Cys Asp Glu Ala His Lys Met Lys Phe Ser Asp Leu Phe Ser Leu  
 130 135 140

Ala Glu Glu Tyr Glu Asp Ser Ser Thr Lys Pro Pro Lys Ser Arg Arg  
 145 150 155 160

Lys Ala Ala Leu Ser Ser Pro Arg Ser Arg Lys Asn Ala Thr Gln Pro  
 165 170 175

Pro Asn Ala Glu Glu Glu Ser Gly Ser Ser Ser Ala Ser Glu Glu Glu  
 180 185 190

Asp Thr Lys Pro Lys Pro Thr Lys Arg Lys Arg Lys Gly Ser Ser Ala  
 195 200 205

Val Gly Ser Asp Ser Asp  
 210

<210> 1590

<211> 200

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (27)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1590

Lys Met His Ile Leu His Ala Asp Ile Lys Pro Asp Asn Ile Leu Val  
 1 5 10 15

Asn Glu Ser Lys Thr Ile Leu Lys Leu Cys Xaa Phe Gly Ser Ala Ser  
 20 25 30

His Val Ala Asp Asn Asp Ile Thr Pro Tyr Leu Val Ser Arg Phe Tyr  
 35 40 45

Arg Ala Pro Glu Ile Ile Ile Gly Lys Ser Tyr Asp Tyr Gly Ile Asp  
 50 55 60

Met Trp Ser Val Gly Cys Thr Leu Tyr Glu Leu Tyr Thr Gly Lys Ile  
 65 70 75 80

Leu Phe Pro Gly Lys Thr Asn Asn His Met Leu Lys Leu Ala Met Asp  
 85 90 95

Leu Lys Gly Lys Met Pro Asn Lys Met Ile Arg Lys Gly Val Phe Lys

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                100                105                110
Asp Gln His Phe Asp Gln Asn Leu Asn Phe Met Tyr Ile Glu Val Asp
      115                120                125

Lys Val Thr Glu Arg Glu Lys Val Thr Val Met Ser Thr Ile Asn Pro
      130                135                140

Thr Lys Asp Leu Leu Ala Asp Leu Ile Gly Cys Gln Arg Leu Pro Glu
      145                150                155                160

Asp Gln Arg Lys Lys Val His Gln Leu Lys Asp Leu Leu Asp Gln Ile
      165                170                175

Leu Met Leu Asp Pro Ala Lys Arg Ile Ser Ile Asn Gln Ala Leu Gln
      180                185                190

His Ala Phe Ile Gln Glu Lys Ile
      195                200

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<210> 1591
<211> 115
<212> PRT
<213> Homo sapiens

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<400> 1591
Val Thr Leu Ala Arg Ser Leu Gln Ser Arg Pro Val Ala Met Ser Ala
  1                5                10                15

Asp Val Thr Ser Ser Leu Ala Ala Phe Gly Glu Gly Trp Gly Val Arg
      20                25                30

Glu Leu Ser Asp His Ser Ser Pro Arg Pro Leu Leu Gly Leu Ala Arg
      35                40                45

Arg Ala Pro Arg Val Asp Pro Pro Ala Thr Gly Val Phe Ser Pro Leu
      50                55                60

Leu Pro Pro Ser Gly Leu Met Arg Gln Arg Gly Gly Cys Gly Ala Cys
      65                70                75                80

Leu Gly Arg Thr Glu Leu Ser Leu Gly Lys Thr Tyr Phe Val Asn Lys
      85                90                95

Trp Asn Thr Trp Leu Tyr Ser Lys Lys Lys Lys Lys Lys Lys Lys
      100                105                110

Lys Ser Arg
      115

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<210> 1592  
<211> 66  
<212> PRT  
<213> Homo sapiens

<400> 1592  
Val Cys Cys Cys Lys Lys Ser Pro Met Cys Ile Thr Asn Ser Glu Tyr  
1 5 10 15  
Phe Leu Arg Leu Lys Lys Thr Gly Val Thr Ser Arg Tyr Cys Cys Val  
20 25 30  
Met Val Thr Leu Thr Lys Arg His Gln Pro Leu Arg Val Leu Tyr Cys  
35 40 45  
Lys Ala Gln Ile Thr Phe Val Cys Tyr Thr Leu Ile Gly Glu Leu Lys  
50 55 60  
Val Ile  
65

<210> 1593  
<211> 91  
<212> PRT  
<213> Homo sapiens

<400> 1593  
Glu Ser Leu Trp Ala Phe Cys Leu Ser Leu Leu Glu Arg Leu Ala Cys  
1 5 10 15  
Cys Ser Leu Leu Tyr Pro Glu Val Cys Leu Trp Asp Phe Ser Pro Val  
20 25 30  
Ala Val Glu Thr Arg Arg Pro Thr Leu Phe Glu Thr Gln Met Leu Leu  
35 40 45  
Ser Leu Ala Ser Pro Ser Leu Ser Ser Pro Asn Glu Pro Thr Phe Cys  
50 55 60  
Thr Ser Thr Arg Met Pro Gly Arg Leu Gly Pro Gln Arg Leu Leu Phe  
65 70 75 80  
Gln Asn Leu Trp Lys Pro Arg Leu Asn Val Pro  
85 90

&lt;210&gt; 1594

&lt;211&gt; 442

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (22)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1594

Leu Glu Gln Glu Leu Gly Asp Gly Trp Gly His Ser Asp Leu His Lys  
 1 5 10 15

Ala Leu Leu Cys Arg Xaa Pro Pro Leu Pro Glu Pro Asp Ala Met Ser  
 20 25 30

Ser Lys Gly Ser Val Val Leu Ala Tyr Ser Gly Gly Leu Asp Thr Ser  
 35 40 45

Cys Ile Leu Val Trp Leu Lys Glu Gln Gly Tyr Asp Val Ile Ala Tyr  
 50 55 60

Leu Ala Asn Ile Gly Gln Lys Glu Asp Phe Glu Glu Ala Arg Lys Lys  
 65 70 75 80

Ala Leu Lys Leu Gly Ala Lys Lys Val Phe Ile Glu Asp Val Ser Arg  
 85 90 95

Glu Phe Val Glu Glu Phe Ile Trp Pro Ala Ile Gln Ser Ser Ala Leu  
 100 105 110

Tyr Glu Asp Arg Tyr Leu Leu Gly Thr Ser Leu Ala Arg Pro Cys Ile  
 115 120 125

Ala Arg Lys Gln Val Glu Ile Ala Gln Arg Glu Gly Ala Lys Tyr Val  
 130 135 140

Ser His Gly Ala Thr Gly Lys Gly Asn Asp Gln Val Arg Phe Glu Leu  
 145 150 155 160

Ser Cys Tyr Ser Leu Ala Pro Gln Ile Lys Val Ile Ala Pro Trp Arg  
 165 170 175

Met Pro Glu Phe Tyr Asn Arg Phe Lys Gly Arg Asn Asp Leu Met Glu  
 180 185 190

Tyr Ala Lys Gln His Gly Ile Pro Ile Pro Val Thr Pro Lys Asn Pro  
 195 200 205

Trp Ser Met Asp Glu Asn Leu Met His Ile Ser Tyr Glu Ala Gly Ile  
 210 215 220  
 Leu Glu Asn Pro Lys Asn Gln Ala Pro Pro Gly Leu Tyr Thr Lys Thr  
 225 230 235 240  
 Gln Asp Pro Ala Lys Ala Pro Asn Thr Pro Asp Ile Leu Glu Ile Glu  
 245 250 255  
 Phe Lys Lys Gly Val Pro Val Lys Val Thr Asn Val Lys Asp Gly Thr  
 260 265 270  
 Thr His Gln Thr Ser Leu Glu Leu Phe Met Tyr Leu Asn Glu Val Ala  
 275 280 285  
 Gly Lys His Gly Val Gly Arg Ile Asp Ile Val Glu Asn Arg Phe Ile  
 290 295 300  
 Gly Met Lys Ser Arg Gly Ile Tyr Glu Thr Pro Ala Gly Thr Ile Leu  
 305 310 315 320  
 Tyr His Ala His Leu Asp Ile Glu Ala Phe Thr Met Asp Arg Glu Val  
 325 330 335  
 Arg Lys Ile Lys Gln Gly Leu Gly Leu Lys Phe Ala Glu Leu Val Tyr  
 340 345 350  
 Thr Gly Phe Trp His Ser Pro Glu Cys Glu Phe Val Arg His Cys Ile  
 355 360 365  
 Ala Lys Ser Gln Glu Arg Val Glu Gly Lys Val Gln Val Ser Val Leu  
 370 375 380  
 Lys Gly Gln Val Tyr Ile Leu Gly Arg Glu Ser Pro Leu Ser Leu Tyr  
 385 390 395 400  
 Asn Glu Glu Leu Val Ser Met Asn Val Gln Gly Asp Tyr Glu Pro Thr  
 405 410 415  
 Asp Ala Thr Gly Phe Ile Asn Ile Asn Ser Leu Arg Leu Lys Glu Tyr  
 420 425 430  
 His Arg Leu Gln Ser Lys Val Thr Ala Lys  
 435 440

&lt;210&gt; 1595

&lt;211&gt; 456

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1595

Phe Gly Thr Ser Gln Phe Leu Leu Pro Leu Pro Ala Lys Met Ser Asp  
 1 5 10 15  
 Met Glu Asp Asp Phe Met Cys Asp Asp Glu Glu Asp Tyr Asp Leu Glu  
 20 25 30  
 Tyr Ser Glu Asp Ser Asn Ser Glu Pro Asn Val Asp Leu Glu Asn Gln  
 35 40 45  
 Tyr Tyr Asn Ser Lys Ala Leu Lys Glu Asp Asp Pro Lys Ala Ala Leu  
 50 55 60  
 Ser Ser Phe Gln Lys Val Leu Glu Leu Glu Gly Glu Lys Gly Glu Trp  
 65 70 75 80  
 Gly Phe Lys Ala Leu Lys Gln Met Ile Lys Ile Asn Phe Lys Leu Thr  
 85 90 95  
 Asn Phe Pro Glu Met Met Asn Arg Tyr Lys Gln Leu Leu Thr Tyr Ile  
 100 105 110  
 Arg Ser Ala Val Thr Arg Asn Tyr Ser Glu Lys Ser Ile Asn Ser Ile  
 115 120 125  
 Leu Asp Tyr Ile Ser Thr Ser Lys Gln Met Asp Leu Leu Gln Glu Phe  
 130 135 140  
 Tyr Glu Thr Thr Leu Glu Ala Leu Lys Asp Ala Lys Asn Asp Arg Leu  
 145 150 155 160  
 Trp Phe Lys Thr Asn Thr Lys Leu Gly Lys Leu Tyr Leu Glu Arg Glu  
 165 170 175  
 Glu Tyr Gly Lys Leu Gln Lys Ile Leu Arg Gln Leu His Gln Ser Cys  
 180 185 190  
 Gln Thr Asp Asp Gly Glu Asp Asp Leu Lys Lys Gly Thr Gln Leu Leu  
 195 200 205  
 Glu Ile Tyr Ala Leu Glu Ile Gln Met Tyr Thr Ala Gln Lys Asn Asn  
 210 215 220  
 Lys Lys Leu Lys Ala Leu Tyr Glu Gln Ser Leu His Ile Lys Ser Ala  
 225 230 235 240  
 Ile Pro His Pro Leu Ile Met Gly Val Ile Arg Glu Cys Gly Gly Lys  
 245 250 255  
 Met His Leu Arg Glu Gly Glu Phe Glu Lys Ala His Thr Asp Phe Phe

260	265	270
Glu Ala Phe Lys Asn Tyr Asp	Glu Ser Gly Ser Pro Arg Arg Thr Thr	
275	280	285
Cys Leu Lys Tyr Leu Val Leu Ala Asn Met Leu Met Lys Ser Gly Ile		
290	295	300
Asn Pro Phe Asp Ser Gln Glu Ala Lys Pro Tyr Lys Asn Asp Pro Glu		
305	310	315
Ile Leu Ala Met Thr Asn Leu Val Ser Ala Tyr Gln Asn Asn Asp Ile		
325	330	335
Thr Glu Phe Glu Lys Ile Leu Lys Thr Asn His Ser Asn Ile Met Asp		
340	345	350
Asp Pro Phe Ile Arg Glu His Ile Glu Glu Leu Leu Arg Asn Ile Arg		
355	360	365
Thr Gln Val Leu Ile Lys Leu Ile Lys Pro Tyr Thr Arg Ile His Ile		
370	375	380
Pro Phe Ile Ser Lys Glu Leu Asn Ile Asp Val Ala Asp Val Glu Ser		
385	390	395
Leu Leu Val Gln Cys Ile Leu Asp Asn Thr Ile His Gly Arg Ile Asp		
405	410	415
Gln Val Asn Gln Leu Leu Glu Leu Asp His Gln Lys Arg Gly Gly Ala		
420	425	430
Arg Tyr Thr Ala Leu Asp Lys Trp Thr Asn Gln Leu Asn Ser Leu Asn		
435	440	445
Gln Ala Val Val Ser Lys Leu Ala		
450	455	

&lt;210&gt; 1596

&lt;211&gt; 375

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (176)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1596

Ser Phe Gly Glu Arg Ala Pro Ser Thr Arg Ser Gly Asp Pro Leu Val  
 1 5 10 15  
 Ala Val Leu Pro Thr Arg Thr Arg Val Pro Gln Ala Ser Arg Cys Pro  
 20 25 30  
 Ala Gly Ser Ser Cys Pro Thr Pro Gly Ala Arg Pro Pro Ala Ser Pro  
 35 40 45  
 Gly Pro Leu Pro Arg Pro Ser Ser Arg Arg Ala Arg Ser Met Ala Pro  
 50 55 60  
 Pro Gln Val Leu Ala Phe Gly Leu Leu Leu Ala Ala Ala Thr Ala Thr  
 65 70 75 80  
 Phe Ala Ala Ala Gln Glu Glu Cys Val Cys Glu Asn Tyr Lys Leu Ala  
 85 90 95  
 Val Asn Cys Phe Val Asn Asn Asn Arg Gln Cys Gln Cys Thr Ser Val  
 100 105 110  
 Gly Ala Gln Asn Thr Val Ile Cys Ser Lys Leu Ala Ala Lys Cys Leu  
 115 120 125  
 Val Met Lys Ala Glu Met Asn Gly Ser Lys Leu Gly Arg Arg Ala Lys  
 130 135 140  
 Pro Glu Gly Ala Leu Gln Asn Asn Asp Gly Leu Tyr Asp Pro Asp Cys  
 145 150 155 160  
 Asp Glu Ser Gly Leu Phe Lys Ala Lys Gln Cys Asn Gly Thr Ser Xaa  
 165 170 175  
 Cys Trp Cys Val Asn Thr Ala Gly Val Arg Arg Thr Asp Lys Asp Thr  
 180 185 190  
 Glu Ile Thr Cys Ser Glu Arg Val Arg Thr Tyr Trp Ile Ile Ile Glu  
 195 200 205  
 Leu Lys His Lys Ala Arg Glu Lys Pro Tyr Asp Ser Lys Ser Leu Arg  
 210 215 220  
 Thr Ala Leu Gln Lys Glu Ile Thr Thr Arg Tyr Gln Leu Asp Pro Lys  
 225 230 235 240  
 Phe Ile Thr Ser Ile Leu Tyr Glu Asn Asn Val Ile Thr Ile Asp Leu  
 245 250 255  
 Val Gln Asn Ser Ser Gln Lys Thr Gln Asn Asp Val Asp Ile Ala Asp  
 260 265 270

Val Ala Tyr Tyr Phe Glu Lys Asp Val Lys Gly Glu Ser Leu Phe His  
275 280 285

Ser Lys Lys Met Asp Leu Thr Val Asn Gly Glu Gln Leu Asp Leu Asp  
290 295 300

Pro Gly Gln Thr Leu Ile Tyr Tyr Val Asp Glu Lys Ala Pro Glu Phe  
305 310 315 320

Ser Met Gln Gly Leu Lys Ala Gly Val Ile Ala Val Ile Val Val Val  
325 330 335

Val Ile Ala Val Val Ala Gly Ile Val Val Leu Val Ile Ser Arg Lys  
340 345 350

Lys Arg Met Ala Lys Tyr Glu Lys Ala Glu Ile Lys Glu Met Gly Glu  
355 360 365

Met His Arg Glu Leu Asn Ala  
370 375

<210> 1597

<211> 83

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (71)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1597

Ala Leu Gly Pro Gln Ala Ser Pro Leu Gln Ser Leu Ala Ala Ser Leu  
1 5 10 15

Asp Ala Glu Pro Ser Ser Ala Ala Val Pro Asp Gly Phe Pro Ala Gly  
20 25 30

Pro Thr Val Ser Pro Arg Arg Leu Ala Arg Pro Pro Gly Leu Glu Glu  
35 40 45

Ala Leu Ser Ala Leu Gly Leu Gln Gly Glu Arg Asp Thr Pro Gly Thr  
50 55 60

Ser Ser Pro Lys Ser Trp Xaa Gly Ser Arg Glu Arg Gln Lys His Ser  
65 70 75 80

Val Gly Glu

<210> 1598  
<211> 103  
<212> PRT  
<213> Homo sapiens

<400> 1598  
Gln Pro Glu Val Pro Asp Arg Arg Cys Val Ile His Arg Arg Arg Arg  
1 5 10 15  
Tyr Gly Ser Ser Thr Glu Ala His Ala Lys Leu Ser Thr Met Ala Ser  
20 25 30  
Ser Thr Val Pro Val Ser Ala Ala Gly Ser Ala Asn Glu Thr Pro Glu  
35 40 45  
Ile Pro Asp Asn Val Gly Asp Trp Leu Arg Gly Val Tyr Arg Phe Ala  
50 55 60  
Thr Asp Arg Asn Asp Phe Arg Arg Asn Leu Ile Leu Asn Leu Gly Leu  
65 70 75 80  
Phe Ala Ala Gly Val Trp Leu Ala Arg Asn Leu Ser Asp Ile Asp Leu  
85 90 95  
Met Ala Pro Gln Pro Gly Val  
100

<210> 1599  
<211> 154  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (125)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (135)  
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1599  
Arg Arg Thr Tyr Tyr Gly Lys Thr Trp Asn Cys Arg Ala Arg Tyr Leu  
1 5 10 15



Val Arg Asn Ser Arg Val Asp Pro Arg Val Arg Ala Asp Trp Gly Gly  
20 25 30

Gly Gly Leu Ala Arg Pro Gly Leu Ala Cys Gln Gly Ala Gly Gly Gly  
35 40 45

Gly Ser Ser Thr Met Ser Leu Gln Tyr Gly Ala Glu Glu Thr Pro Leu  
50 55 60

Ala Gly Ser Tyr Gly Ala Ala Asp Ser Phe Pro Lys Asp Phe Gly Tyr  
65 70 75 80

Gly Val Glu Glu Glu Glu Glu Glu Ala Ala Ala Ala Gly Gly Gly Val  
85 90 95

Gly Ala Gly Ala Gly Gly Gly Cys Gly Pro Gly Gly Ala Asp Ser Ser  
100 105 110

Lys Pro Arg Ile Leu Leu Met Gly Thr Pro Ala Gln Xaa Lys Phe Leu  
115 120 125

His Pro Glu Ser Gly Val Xaa Ile Lys Met Phe Asn Gln Arg Asp Pro  
130 135 140

Leu Phe Leu Gly Asn Tyr Gln Thr Arg Phe  
145 150

<210> 1600

<211> 108

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (24)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (27)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (68)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1600

Gly Cys Ser Phe Lys Trp Gly Leu Thr Gly Asn Val Thr Leu Ser Arg

1                    5                    10                    15  
 Asp Val Arg Glu Val Asp Pro Xaa Gln Gly Xaa Pro Gly Arg Gly Thr  
                   20                    25                    30  
 Gly Cys Ala Leu Pro Gln Ser Glu Asn Leu Leu Tyr Val Val Arg Lys  
                   35                    40                    45  
 Glu Gln Gly Asp Gln Ala Glu Ser Trp Ala Gly Val Glu Trp Lys Glu  
                   50                    55                    60  
 Arg Arg Leu Xaa Arg Thr Gly Gly Gly Gly Pro Trp Leu Leu Leu Ser  
                   65                    70                    75                    80  
 Glu Met Gly Thr Thr Gly Gly Phe Glu Gln Arg Ser Ala Leu Ile Asp  
                   85                    90                    95  
 Leu Tyr Phe Ala Arg Val Ile Leu Ala Ala Ile Leu  
                   100                    105

&lt;210&gt; 1601

&lt;211&gt; 253

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1601

Ala Pro Arg Ser Pro Arg Gly Arg Cys Gly Gly Thr Arg Ala Glu Ala  
   1                    5                    10                    15  
 Ala Ala Ala Thr Trp Ala Ala Ala Gly Pro Arg Arg Arg Ala Val Arg  
                   20                    25                    30  
 Met Ser Gly Trp Ala Asp Glu Arg Gly Gly Glu Gly Asp Gly Arg Ile  
                   35                    40                    45  
 Tyr Val Gly Asn Leu Pro Thr Asp Val Arg Glu Lys Asp Leu Glu Asp  
                   50                    55                    60  
 Leu Phe Tyr Lys Tyr Gly Arg Ile Arg Glu Ile Glu Leu Lys Asn Arg  
                   65                    70                    75                    80  
 His Gly Leu Val Pro Phe Ala Phe Val Arg Phe Glu Asp Pro Arg Asp  
                   85                    90                    95  
 Ala Glu Asp Ala Ile Tyr Gly Arg Asn Gly Tyr Asp Tyr Gly Gln Cys  
                   100                    105                    110  
 Arg Leu Arg Val Glu Phe Pro Arg Thr Tyr Gly Gly Arg Gly Gly Trp  
                   115                    120                    125

Pro Arg Gly Gly Arg Asn Gly Pro Pro Thr Arg Arg Ser Asp Phe Arg  
 130 135 140

Val Leu Val Ser Gly Leu Pro Pro Ser Gly Ser Trp Gln Asp Leu Lys  
 145 150 155 160

Asp His Met Arg Glu Ala Gly Asp Val Cys Tyr Ala Asp Val Gln Lys  
 165 170 175

Asp Gly Val Gly Met Val Glu Tyr Leu Arg Lys Glu Asp Met Glu Tyr  
 180 185 190

Ala Leu Arg Lys Leu Asp Asp Thr Lys Phe Arg Ser His Glu Gly Glu  
 195 200 205

Thr Ser Tyr Ile Arg Val Tyr Pro Glu Arg Ser Thr Ser Tyr Gly Tyr  
 210 215 220

Ser Arg Ser Arg Ser Gly Ser Arg Gly Arg Asp Ser Pro Tyr Gln Ser  
 225 230 235 240

Arg Gly Ser Pro His Tyr Phe Ser Pro Phe Arg Pro Tyr  
 245 250

<210> 1602

<211> 310

<212> PRT

<213> Homo sapiens

<400> 1602

Pro Arg Ala Ala Arg Pro Pro Ala Met Glu Pro Gly Pro Asp Gly Pro  
 1 5 10 15

Ala Ala Ser Gly Pro Ala Ala Ile Arg Glu Gly Trp Phe Arg Glu Thr  
 20 25 30

Cys Ser Leu Trp Pro Gly Gln Ala Leu Ser Leu Gln Val Glu Gln Leu  
 35 40 45

Leu His His Arg Arg Ser Arg Tyr Gln Asp Ile Leu Val Phe Arg Ser  
 50 55 60

Lys Thr Tyr Gly Asn Val Leu Val Leu Asp Gly Val Ile Gln Cys Thr  
 65 70 75 80

Glu Arg Asp Glu Phe Ser Tyr Gln Glu Met Ile Ala Asn Leu Pro Leu  
 85 90 95

Cys Ser His Pro Asn Pro Arg Lys Val Leu Ile Ile Gly Gly Gly Asp  
100 105 110

Gly Gly Val Leu Arg Glu Val Val Lys His Pro Ser Val Glu Ser Val  
115 120 125

Val Gln Cys Glu Ile Asp Glu Asp Val Ile Gln Val Ser Lys Lys Phe  
130 135 140

Leu Pro Gly Met Ala Ile Gly Tyr Ser Ser Ser Lys Leu Thr Leu His  
145 150 155 160

Val Gly Asp Gly Phe Glu Phe Met Lys Gln Asn Gln Asp Ala Phe Asp  
165 170 175

Val Ile Ile Thr Asp Ser Ser Asp Pro Met Gly Pro Ala Glu Ser Leu  
180 185 190

Phe Lys Glu Ser Tyr Tyr Gln Leu Met Lys Thr Ala Leu Lys Glu Asp  
195 200 205

Gly Val Leu Cys Cys Gln Gly Glu Cys Gln Trp Leu His Leu Asp Leu  
210 215 220

Ile Lys Glu Met Arg Gln Phe Cys Gln Ser Leu Phe Pro Val Val Ala  
225 230 235 240

Tyr Ala Tyr Cys Thr Ile Pro Thr Tyr Pro Ser Gly Gln Ile Gly Phe  
245 250 255

Met Leu Cys Ser Lys Asn Pro Ser Thr Asn Phe Gln Glu Pro Val Gln  
260 265 270

Pro Leu Thr Gln Gln Gln Val Ala Gln Met Gln Leu Lys Tyr Tyr Asn  
275 280 285

Ser Asp Val His Arg Ala Ala Phe Val Leu Pro Glu Phe Ala Arg Lys  
290 295 300

Ala Leu Asn Asp Val Ser  
305 310

&lt;210&gt; 1603

&lt;211&gt; 41

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

<222> (290)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (298)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (306)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1605

Pro Arg Ile His Leu Glu Asn Val Ser Glu Asp Glu Ile Asn Arg Leu  
1 5 10 15

Leu Gly Met Val Val Asp Val Glu Asn Leu Phe Met Ser Xaa Xaa Lys  
20 25 30

Glu Glu Asp Thr Asp Thr Lys Gln Val Tyr Phe Tyr Leu Phe Lys Leu  
35 40 45

Leu Arg Lys Cys Ile Leu Gln Met Thr Arg Pro Val Val Glu Gly Ser  
50 55 60

Leu Gly Ser Pro Pro Phe Glu Lys Pro Asn Ile Glu Gln Gly Val Leu  
65 70 75 80

Asn Phe Val Gln Tyr Lys Phe Ser His Leu Ala Pro Arg Glu Arg Gln  
85 90 95

Thr Met Phe Glu Leu Ser Lys Met Phe Leu Leu Cys Leu Asn Tyr Trp  
100 105 110

Lys Leu Glu Xaa Pro Ala Gln Phe Arg Gln Arg Ser Gln Ala Glu Asp  
115 120 125

Val Ala Thr Tyr Lys Val Asn Tyr Thr Arg Trp Leu Cys Tyr Cys His  
130 135 140

Val Pro Gln Ser Cys Asp Ser Leu Pro Arg Tyr Glu Thr Thr His Val  
145 150 155 160

Phe Gly Arg Ser Leu Leu Arg Ser Ile Phe Thr Val Thr Arg Arg Gln  
165 170 175

Leu Leu Glu Lys Phe Xaa Val Glu Lys Asp Lys Leu Val Pro Glu Lys  
180 185 190

Arg Thr Ser Ser Ser Leu Thr Ser Pro Ser Lys Ala Pro Ser Gly Leu

195	200	205
Pro Gly Phe Gly Pro Lys Phe Thr Ser Ser Leu Leu Ser Pro Phe Phe		
210	215	220
Gln Xaa Gly Phe Leu Asp Trp Ser Leu Leu Ser Leu His Gly Pro Phe		
225	230	235 240
Gly Ile Trp Ala Ser Thr Trp Gln Thr Cys Pro Trp Pro Arg Ser Asn		
	245	250 255
Leu Leu Val Leu Val Trp Gly Trp Gln Ile Pro Val His Ala Gly Gly		
	260	265 270
Gly Asp Leu Trp Gly Lys Leu Ser Asn Leu Gly Val Xaa Leu Xaa His		
	275	280 285
Ala Xaa Leu Arg Gly Asp Thr Ala Gly Xaa Pro Gly Gln Leu Gln Ser		
	290	295 300
Val Xaa Gly Leu Phe Pro Ala Pro Pro Ser Ser Ala Pro Ala Trp Val		
305	310	315 320
Gly Ala Ala Thr Ala Pro		
	325	

&lt;210&gt; 1606

&lt;211&gt; 94

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (32)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (35)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (70)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1606

Phe Gly Thr Trp Lys Lys Lys Lys Lys Thr Leu Arg Asp Ser Leu Cys

1

5

10

15

Glu Glu Leu Leu Thr Glu Ser Leu Ser Thr Phe Leu Pro Pro Asp Xaa  
                   20                  25                  30

Glu Asp Xaa Gly Val Ser Val Ser Val Leu Ser Pro Leu Leu Phe Pro  
           35                  40                  45

Asn Gln Gly Leu Cys His Tyr Cys Pro Ser Gln Leu Ser Met Gln Glu  
       50                  55                  60

Asp Arg Val Ala Trp Xaa Ser Tyr Pro Cys Pro Ser Pro Lys Gly Ser  
       65                  70                  75                  80

Thr Arg Lys Leu Lys Arg Leu Lys Lys Lys Arg Val Cys Ser  
                   85                  90

<210> 1607

<211> 246

<212> PRT

<213> Homo sapiens

<400> 1607

Ala Ala Ala Trp Cys Ala Arg Leu Ala Gly Asp Gly Ile Arg Arg Thr  
       1                  5                  10                  15

Trp Thr Pro Pro Glu Trp Lys Pro Lys Gln Glu Leu Leu Leu Leu Arg  
           20                  25                  30

Gly Cys Arg Ser Arg Arg Glu Pro Pro Asp Arg Arg Gln Ser Glu Glu  
           35                  40                  45

Gly Ala Thr Arg Leu Gly Lys Met Thr Gln Phe Leu Pro Pro Asn Leu  
       50                  55                  60

Leu Ala Leu Phe Ala Pro Arg Asp Pro Ile Pro Tyr Leu Pro Pro Leu  
       65                  70                  75                  80

Glu Lys Leu Pro His Glu Lys His His Asn Gln Pro Tyr Cys Gly Ile  
           85                  90                  95

Ala Pro Tyr Ile Arg Glu Phe Glu Asp Pro Arg Asp Ala Pro Pro Pro  
           100                  105                  110

Thr Arg Ala Glu Thr Arg Glu Glu Arg Met Glu Arg Lys Arg Arg Glu  
       115                  120                  125

Lys Ile Glu Arg Arg Gln Gln Glu Val Glu Thr Glu Leu Lys Met Trp  
       130                  135                  140

Asp Pro His Asn Asp Pro Asn Ala Gln Gly Asp Ala Phe Lys Thr Leu  
 145 150 155 160  
 Phe Val Ala Arg Val Asn Tyr Asp Thr Thr Glu Ser Lys Leu Arg Arg  
 165 170 175  
 Glu Phe Glu Val Tyr Gly Pro Ile Lys Arg Ile His Met Val Tyr Ser  
 180 185 190  
 Lys Arg Ser Gly Lys Pro Arg Gly Tyr Ala Phe Ile Glu Tyr Glu His  
 195 200 205  
 Glu Arg Asp Met His Ser Ala Tyr Lys His Ala Asp Gly Lys Lys Ile  
 210 215 220  
 Asp Gly Arg Arg Val Leu Val Asp Val Glu Arg Gly Arg Thr Val Lys  
 225 230 235 240  
 Gly Trp Arg Pro Gly Gly  
 245

&lt;210&gt; 1608

&lt;211&gt; 65

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (60)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (62)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1608

Gly Pro Ser Leu Ser Leu Met Phe Lys Gln Ser Leu Ser Met Lys Leu  
 1 5 10 15

Gly Gly Asp Arg Val Ser Cys Gln Phe Leu Thr Ala Thr Ser His Gln  
 20 25 30

Trp Leu His Ser Val Ser Leu Thr Gln His Met Ala Gln Glu Cys Cys  
 35 40 45

His Pro Ser Val Phe Tyr Ser Ser Asn Pro Arg Xaa Trp Xaa Leu Arg  
 50 55 60



Asp  
65

<210> 1609  
<211> 213  
<212> PRT  
<213> Homo sapiens

<400> 1609  
Glu Ser Gln Glu Asp Lys Glu Pro Lys Glu Glu Thr Pro Ala Gly Gly  
1 5 10 15  
Arg Ala Ala Ala Ala Asp Pro Gly Trp Gly Ser Gln Pro Ala Gln Gln  
20 25 30  
Arg Ala Ala Arg Lys Ala Ser Lys Glu Glu Gly Ala Arg Arg Gly Val  
35 40 45  
Arg Gly Leu Gly Val Arg Pro Leu Arg Pro Leu Gly Asn Arg Glu Trp  
50 55 60  
Thr Ala Glu Gln Thr Val Gly Leu Ser Gly Val Trp Gly Asn Thr Gly  
65 70 75 80  
Asn Ser Ser Gln Glu Gly Tyr Pro Pro Tyr Trp Leu Pro Pro Pro Ala  
85 90 95  
Ala Gln Leu Cys Pro Pro Glu Pro Ser Val Ser Leu Asn Pro Ser Leu  
100 105 110  
Phe Phe Pro Thr Ser Thr Phe Trp Thr Phe Pro Leu Pro Phe Pro Val  
115 120 125  
Phe Lys Ile Ser Val Thr Thr Pro Gly Thr Phe Ala Ala Asp Leu Gly  
130 135 140  
Val Leu Phe Lys Arg Lys Ser Gly Gly Trp Glu Ser Leu Gly Glu Leu  
145 150 155 160  
Arg Leu Arg Val Glu Gly Val Cys Pro Ser Leu Gly Val Leu Val Pro  
165 170 175  
Val Arg Gly Val Tyr Gly Leu Phe Pro Ser Pro Ser Leu Ile Phe Phe  
180 185 190  
Phe Phe Leu Lys Lys Ala Lys Met Arg Ile Asn Thr Ser Arg His Val  
195 200 205  
Lys Lys Lys Lys Lys

210

<210> 1610  
<211> 916  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (365)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (524)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (687)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (806)  
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1610  
Arg Pro Thr Arg Pro Ala Gly Ser Thr Asp Cys His Gly Ala Ala Ala  
1 5 10 15  
Gly Val Arg Ala Thr Leu Val Leu Glu Leu Leu Asp Thr Asp Gly Leu  
20 25 30  
Val Val Cys Ala Arg Gly Leu Gly Ala Asp Arg Leu Leu Tyr His Phe  
35 40 45  
Leu Gln Leu His Cys His Pro Ala Cys Leu Val Leu Val Leu Asn Thr  
50 55 60  
Gln Pro Ala Glu Glu Glu Tyr Phe Ile Asn Gln Leu Lys Ile Glu Gly  
65 70 75 80  
Val Glu His Leu Pro Arg Arg Val Thr Asn Glu Ile Thr Ser Asn Ser  
85 90 95  
Arg Tyr Glu Val Tyr Thr Gln Gly Gly Val Ile Phe Ala Thr Ser Arg  
100 105 110

Ile Leu Val Val Asp Phe Leu Thr Asp Arg Ile Pro Ser Asp Leu Ile  
115 120 125

Thr Gly Ile Leu Val Tyr Arg Ala His Arg Ile Ile Glu Ser Cys Gln  
130 135 140

Glu Ala Phe Ile Leu Arg Leu Phe Arg Gln Lys Asn Lys Arg Gly Phe  
145 150 155 160

Ile Lys Ala Phe Thr Asp Asn Ala Val Ala Phe Asp Thr Gly Phe Cys  
165 170 175

His Val Glu Arg Val Met Arg Asn Leu Phe Val Arg Lys Leu Tyr Leu  
180 185 190

Trp Pro Arg Phe His Val Ala Val Asn Ser Phe Leu Glu Gln His Lys  
195 200 205

Pro Glu Val Val Glu Ile His Val Ser Met Thr Pro Thr Met Leu Ala  
210 215 220

Ile Gln Thr Ala Ile Leu Asp Ile Leu Asn Ala Cys Leu Lys Glu Leu  
225 230 235 240

Lys Cys His Asn Pro Ser Leu Glu Val Glu Asp Leu Ser Leu Glu Asn  
245 250 255

Ala Ile Gly Lys Pro Phe Asp Lys Thr Ile Arg His Tyr Leu Asp Pro  
260 265 270

Leu Trp His Gln Leu Gly Ala Lys Thr Lys Ser Leu Val Gln Asp Leu  
275 280 285

Lys Ile Leu Arg Thr Leu Leu Gln Tyr Leu Ser Gln Tyr Asp Cys Val  
290 295 300

Thr Phe Leu Asn Leu Leu Glu Ser Leu Arg Ala Thr Glu Lys Ala Phe  
305 310 315 320

Gly Gln Asn Ser Gly Trp Leu Phe Leu Asp Ser Ser Thr Ser Met Phe  
325 330 335

Ile Asn Ala Arg Ala Arg Val Tyr His Leu Pro Asp Ala Lys Met Ser  
340 345 350

Lys Lys Glu Lys Ile Ser Glu Lys Met Glu Ile Lys Xaa Gly Glu Glu  
355 360 365

Thr Lys Lys Glu Leu Val Leu Glu Ser Asn Pro Lys Trp Glu Ala Leu  
370 375 380

Thr Glu Val Leu Lys Glu Ile Glu Ala Glu Asn Lys Glu Ser Glu Ala  
385 390 395 400

Leu Gly Gly Pro Gly Gln Val Leu Ile Cys Ala Ser Asp Asp Arg Thr  
405 410 415

Cys Ser Gln Leu Arg Asp Tyr Ile Thr Leu Gly Ala Glu Ala Phe Leu  
420 425 430

Leu Arg Leu Tyr Arg Lys Thr Phe Glu Lys Asp Ser Lys Ala Glu Glu  
435 440 445

Val Trp Met Lys Phe Arg Lys Glu Asp Ser Ser Lys Arg Ile Arg Lys  
450 455 460

Ser His Lys Arg Pro Lys Asp Pro Gln Asn Lys Glu Arg Ala Ser Thr  
465 470 475 480

Lys Glu Arg Thr Leu Lys Lys Lys Lys Arg Lys Leu Thr Leu Thr Gln  
485 490 495

Met Val Gly Lys Pro Glu Glu Leu Glu Glu Gly Asp Val Glu Glu  
500 505 510

Gly Tyr Arg Arg Glu Ile Ser Ser Ser Pro Glu Xaa Cys Pro Glu Glu  
515 520 525

Ile Lys His Glu Glu Phe Asp Val Asn Leu Ser Ser Asp Ala Ala Phe  
530 535 540

Gly Ile Leu Lys Glu Pro Leu Thr Ile Ile His Pro Leu Leu Gly Cys  
545 550 555 560

Ser Asp Pro Tyr Ala Leu Thr Arg Val Leu His Glu Val Glu Pro Arg  
565 570 575

Tyr Val Val Leu Tyr Asp Ala Glu Leu Thr Phe Val Arg Gln Leu Glu  
580 585 590

Ile Tyr Arg Ala Ser Arg Pro Gly Lys Pro Leu Arg Val Tyr Phe Leu  
595 600 605

Ile Tyr Gly Gly Ser Thr Glu Glu Gln Arg Tyr Leu Thr Ala Leu Arg  
610 615 620

Lys Glu Lys Glu Ala Phe Glu Lys Leu Ile Arg Glu Lys Ala Ser Met  
625 630 635 640

Val Val Pro Glu Glu Arg Glu Gly Arg Asp Glu Thr Asn Leu Asp Leu  
645 650 655

Val Arg Gly Thr Ala Ser Ala Asp Val Ser Thr Asp Thr Arg Lys Ala  
660 665 670

Gly Gly Gln Glu Gln Asn Gly Thr Gln Gln Ser Ile Val Val Xaa Met  
675 680 685

Arg Glu Phe Arg Ser Glu Leu Pro Ser Leu Ile His Arg Arg Asp Ile  
690 695 700

Asp Ile Glu Pro Val Thr Leu Glu Val Gly Asp Tyr Ile Leu Thr Pro  
705 710 715 720

Glu Met Cys Val Glu Arg Lys Ser Ile Ser Asp Leu Ile Gly Ser Leu  
725 730 735

Asn Asn Gly Arg Leu Tyr Ser Gln Cys Ile Ser Met Ser Arg Tyr Tyr  
740 745 750

Lys Arg Pro Val Leu Leu Ile Glu Phe Asp Pro Ser Lys Pro Phe Ser  
755 760 765

Leu Thr Ser Arg Gly Ala Leu Phe Gln Glu Ile Ser Ser Asn Asp Ile  
770 775 780

Ser Ser Lys Leu Thr Leu Leu Thr Leu His Phe Pro Arg Leu Arg Ile  
785 790 795 800

Leu Trp Cys Pro Ser Xaa His Ala Thr Ala Glu Leu Phe Glu Glu Leu  
805 810 815

Lys Gln Ser Lys Pro Gln Pro Asp Ala Ala Thr Ala Leu Ala Ile Thr  
820 825 830

Ala Asp Ser Glu Thr Leu Pro Glu Ser Glu Lys Tyr Asn Pro Gly Pro  
835 840 845

Gln Asp Phe Leu Leu Lys Met Pro Gly Val Asn Ala Lys Asn Cys Arg  
850 855 860

Ser Leu Met His His Val Lys Asn Ile Ala Glu Leu Ala Ala Leu Ser  
865 870 875 880

Gln Asp Glu Leu Thr Ser Ile Leu Gly Asn Ala Ala Asn Ala Lys Gln  
885 890 895

Leu Tyr Asp Phe Ile His Thr Ser Phe Ala Glu Val Val Ser Lys Gly  
900 905 910

Lys Gly Lys Lys  
915

<210> 1611  
<211> 197  
<212> PRT  
<213> Homo sapiens

<400> 1611  
Gly Gly Gly Pro Ala Pro Gly Asp Ile Val Phe Cys Arg Asn Gln Pro  
1 5 10 15  
Lys Asp Glu Asp Ala Asp Met Met Lys Tyr Ile Glu Thr Glu Leu Lys  
20 25 30  
Lys Arg Lys Gly Ile Val Glu His Glu Glu Gln Lys Val Lys Pro Lys  
35 40 45  
Asn Ala Glu Asp Cys Leu Tyr Glu Leu Pro Glu Asn Ile Arg Val Ser  
50 55 60  
Ser Ala Lys Lys Thr Glu Glu Met Leu Ser Asn Gln Met Leu Ser Gly  
65 70 75 80  
Ile Pro Glu Val Asp Leu Gly Ile Asp Ala Lys Ile Lys Asn Ile Ile  
85 90 95  
Ser Thr Glu Asp Ala Lys Ala Arg Leu Leu Ala Glu Gln Gln Asn Lys  
100 105 110  
Lys Lys Asp Ser Glu Thr Ser Phe Val Pro Thr Asn Met Ala Val Asn  
115 120 125  
Tyr Val Gln His Asn Arg Phe Tyr His Glu Glu Leu Asn Ala Pro Ile  
130 135 140  
Arg Arg Asn Lys Glu Glu Pro Lys Ala Arg Pro Leu Arg Val Gly Asp  
145 150 155 160  
Thr Glu Lys Pro Glu Pro Glu Arg Ser Pro Pro Asn Arg Lys Arg Pro  
165 170 175  
Ala Asn Glu Lys Ala Thr Asp Asp Tyr His Tyr Glu Lys Phe Lys Lys  
180 185 190  
Met Asn Arg Arg Tyr  
195

<210> 1612  
<211> 476

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1612

Pro Arg Val Arg Gly Asp Val Gly Met Ala Gly Val Ala Ile Asp Thr  
1 5 10 15

Val Glu Asp Thr Lys Ile Leu Phe Asp Gly Ile Pro Leu Glu Lys Met  
20 25 30

Ser Val Ser Met Thr Met Asn Gly Ala Val Ile Pro Val Leu Ala Asn  
35 40 45

Phe Ile Val Thr Gly Glu Glu Gln Gly Val Pro Lys Glu Lys Leu Thr  
50 55 60

Gly Thr Ile Gln Asn Asp Ile Leu Lys Glu Phe Met Val Arg Asn Thr  
65 70 75 80

Tyr Ile Phe Pro Pro Glu Pro Ser Met Lys Ile Ile Ala Asp Ile Phe  
85 90 95

Glu Tyr Thr Ala Lys His Met Pro Lys Phe Asn Ser Ile Ser Ile Ser  
100 105 110

Gly Tyr His Met Gln Glu Ala Gly Ala Asp Ala Ile Leu Glu Leu Ala  
115 120 125

Tyr Thr Leu Ala Asp Gly Leu Glu Tyr Ser Arg Thr Gly Leu Gln Ala  
130 135 140

Gly Leu Thr Ile Asp Glu Phe Ala Pro Arg Leu Ser Phe Phe Trp Gly  
145 150 155 160

Ile Gly Met Asn Phe Tyr Met Glu Ile Ala Lys Met Arg Ala Gly Arg  
165 170 175

Arg Leu Trp Ala His Leu Ile Glu Lys Met Phe Gln Pro Lys Asn Ser  
180 185 190

Lys Ser Leu Leu Leu Arg Ala His Cys Gln Thr Ser Gly Trp Ser Leu  
195 200 205

Thr Glu Gln Asp Pro Tyr Asn Asn Ile Val Arg Thr Ala Ile Glu Ala  
210 215 220

Met Ala Ala Val Phe Gly Gly Thr Gln Ser Leu His Thr Asn Ser Phe  
225 230 235 240

Asp Glu Ala Leu Gly Leu Pro Thr Val Lys Ser Ala Arg Ile Ala Arg  
245 250 255

Asn Thr Gln Ile Ile Ile Gln Glu Glu Ser Gly Ile Pro Lys Val Ala  
260 265 270

Asp Pro Trp Gly Gly Ser Tyr Met Met Glu Cys Leu Thr Asn Asp Val  
275 280 285

Tyr Asp Ala Ala Leu Lys Leu Ile Asn Glu Ile Glu Glu Met Gly Gly  
290 295 300

Met Ala Lys Ala Val Ala Glu Gly Ile Pro Lys Leu Arg Ile Glu Glu  
305 310 315 320

Cys Ala Ala Arg Arg Gln Ala Arg Ile Asp Ser Gly Ser Glu Val Ile  
325 330 335

Val Gly Val Asn Lys Tyr Gln Leu Glu Lys Glu Asp Ala Val Glu Val  
340 345 350

Leu Ala Ile Asp Asn Thr Ser Val Arg Asn Arg Gln Ile Glu Lys Leu  
355 360 365

Lys Lys Ile Lys Ser Ser Arg Asp Gln Ala Leu Ala Glu Arg Cys Leu  
370 375 380

Ala Ala Leu Thr Glu Cys Ala Ala Ser Gly Asp Gly Asn Ile Leu Ala  
385 390 395 400

Leu Ala Val Asp Ala Ser Arg Ala Arg Cys Thr Val Gly Glu Ile Thr  
405 410 415

Asp Ala Leu Lys Lys Val Phe Gly Glu His Lys Ala Asn Asp Arg Met  
420 425 430

Val Ser Gly Ala Tyr Arg Gln Glu Phe Gly Glu Ser Lys Glu Ile Thr  
435 440 445

Ser Ala Ile Lys Arg Val His Lys Phe Met Glu Arg Glu Gly Arg Ser  
450 455 460

Ser Ser Ser Cys Ser Lys Asn Gly Thr Arg Trp Pro  
465 470 475

&lt;210&gt; 1613

&lt;211&gt; 319

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;



<221> SITE  
<222> (84)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (85)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (289)  
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1613  
Gln His His Arg Ala Ala His Leu Lys Trp Ile Phe Val Gly Gly Lys  
1 5 10 15  
Gly Gly Val Gly Lys Thr Thr Cys Ser Cys Ser Leu Ala Val Gln Leu  
20 25 30  
Ser Lys Gly Arg Glu Ser Val Leu Ile Ile Ser Thr Asp Pro Ala His  
35 40 45  
Asn Ile Ser Asp Ala Phe Asp Gln Lys Phe Ser Lys Val Pro Thr Lys  
50 55 60  
Val Lys Gly Tyr Asp Asn Leu Phe Ala Met Glu Ile Asp Pro Ser Leu  
65 70 75 80  
Gly Val Ala Xaa Xaa Pro Asp Glu Phe Phe Glu Glu Asp Asn Met Leu  
85 90 95  
Ser Met Gly Lys Lys Met Met Gln Glu Ala Met Ser Ala Phe Pro Gly  
100 105 110  
Ile Asp Glu Ala Met Ser Tyr Ala Glu Val Met Arg Leu Val Lys Gly  
115 120 125  
Met Asn Phe Ser Val Val Val Phe Asp Thr Ala Pro Thr Gly His Thr  
130 135 140  
Leu Arg Leu Leu Asn Phe Pro Thr Ile Val Glu Arg Gly Leu Gly Arg  
145 150 155 160  
Leu Met Gln Ile Lys Asn Gln Ile Ser Pro Phe Ile Ser Gln Met Cys  
165 170 175  
Asn Met Leu Gly Leu Gly Asp Met Asn Ala Asp Gln Leu Ala Ser Lys  
180 185 190

Leu Glu Glu Thr Leu Pro Val Ile Arg Ser Val Ser Glu Gln Phe Lys  
195 200 205

Asp Pro Glu Gln Thr Thr Phe Ile Cys Val Cys Ile Ala Glu Phe Leu  
210 215 220

Ser Leu Tyr Glu Thr Glu Arg Leu Ile Gln Glu Leu Ala Lys Cys Lys  
225 230 235 240

Ile Asp Thr His Asn Ile Ile Val Asn Gln Leu Val Phe Pro Asp Pro  
245 250 255

Glu Lys Pro Cys Lys Met Cys Glu Ala Arg His Lys Ile Gln Ala Lys  
260 265 270

Tyr Leu Asp Gln Met Glu Asp Leu Tyr Glu Asp Phe His Ile Val Lys  
275 280 285

Xaa Pro Leu Leu Pro His Glu Val Arg Gly Ala Asp Lys Val Asn Thr  
290 295 300

Phe Ser Ala Leu Leu Leu Glu Pro Tyr Lys Pro Pro Ser Ala Gln  
305 310 315

<210> 1614

<211> 207

<212> PRT

<213> Homo sapiens

<400> 1614

His Glu Glu Arg Gly Gln Gly Arg Phe Leu Lys Met Ala Ala Leu Lys  
1 5 10 15

Ala Leu Val Ser Gly Cys Gly Arg Leu Leu Arg Gly Leu Leu Ala Gly  
20 25 30

Pro Ala Ala Thr Ser Trp Ser Arg Leu Pro Ala Arg Gly Phe Arg Glu  
35 40 45

Val Val Glu Thr Gln Glu Gly Lys Thr Thr Ile Ile Glu Gly Arg Ile  
50 55 60

Thr Ala Thr Pro Lys Glu Ser Pro Asn Pro Pro Asn Pro Ser Gly Gln  
65 70 75 80

Cys Pro Ile Cys Arg Trp Asn Leu Lys His Lys Tyr Asn Tyr Asp Asp  
85 90 95

Val Leu Leu Leu Ser Gln Phe Ile Arg Pro His Gly Gly Met Leu Pro

100	105	110
Arg Lys Ile Thr Gly Leu Cys Gln Glu Glu His Arg Lys Ile Glu Glu		
115	120	125
Cys Val Lys Met Ala His Arg Ala Gly Leu Leu Pro Asn His Arg Pro		
130	135	140
Arg Leu Pro Glu Gly Val Val Pro Lys Ser Lys Pro Gln Leu Asn Arg		
145	150	155
		160
Tyr Leu Thr Arg Trp Ala Pro Gly Ser Val Lys Pro Ile Tyr Lys Lys		
	165	170
		175
Gly Pro Arg Trp Asn Arg Val Arg Met Pro Val Gly Ser Pro Leu Leu		
	180	185
		190
Arg Asp Asn Val Cys Tyr Ser Arg Thr Pro Trp Lys Leu Tyr His		
195	200	205

&lt;210&gt; 1615

&lt;211&gt; 304

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (174)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1615

Pro Thr Arg Pro Arg Val His Leu Ala Thr Val Ser Ala Ser Ala Ala		
1	5	10
		15
Trp Asp Ala Leu Gly Leu Pro Val Arg Ser His Met Gln Gly Ser Thr		
	20	25
		30
Arg Arg Met Gly Val Met Thr Asp Val His Arg Arg Phe Leu Gln Leu		
	35	40
		45
Leu Met Thr His Gly Val Leu Glu Glu Trp Asp Val Lys Arg Leu Gln		
	50	55
		60
Thr His Cys Tyr Lys Val His Asp Arg Asn Ala Thr Val Asp Lys Leu		
	65	70
		75
		80
Glu Asp Phe Ile Asn Asn Ile Asn Ser Val Leu Glu Ser Leu Tyr Ile		
	85	90
		95

Glu Ile Lys Arg Gly Val Thr Glu Asp Asp Gly Arg Pro Ile Tyr Ala  
100 105 110

Leu Val Asn Leu Ala Thr Thr Ser Ile Ser Lys Met Ala Thr Asp Phe  
115 120 125

Ala Glu Asn Glu Leu Asp Leu Phe Arg Lys Ala Leu Glu Leu Ile Ile  
130 135 140

Asp Ser Glu Thr Gly Phe Ala Ser Ser Thr Asn Ile Leu Asn Leu Val  
145 150 155 160

Asp Gln Leu Lys Gly Lys Lys Met Arg Lys Lys Glu Ala Xaa Gln Val  
165 170 175

Leu Gln Lys Phe Val Gln Asn Lys Trp Leu Ile Glu Lys Glu Gly Glu  
180 185 190

Phe Thr Leu His Gly Arg Ala Ile Leu Glu Met Glu Gln Tyr Ile Arg  
195 200 205

Glu Thr Tyr Pro Asp Ala Val Lys Ile Cys Asn Ile Cys His Ser Leu  
210 215 220

Leu Ile Gln Gly Gln Ser Cys Glu Thr Cys Gly Ile Arg Met His Leu  
225 230 235 240

Pro Cys Val Ala Lys Tyr Phe Gln Ser Asn Ala Glu Pro Arg Cys Pro  
245 250 255

His Cys Asn Asp Tyr Trp Pro His Glu Ile Pro Lys Val Phe Asp Pro  
260 265 270

Glu Lys Glu Arg Glu Ser Gly Val Leu Lys Ser Asn Lys Lys Ser Cys  
275 280 285

Gly Pro Gly Ser Ile Ser His Arg Ala Leu Leu Arg Gly Trp Leu Pro  
290 295 300

&lt;210&gt; 1616

&lt;211&gt; 223

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

<222> (3)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (9)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (216)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1616

Ala Glu Xaa Leu Gly Gly Pro Gly Xaa Ala Ser Gly Gly Glu Thr Ser  
1 5 10 15

Val Glu Arg Arg Arg Thr Cys Ala Phe Asp Thr Leu Glu Ala Phe Leu  
20 25 30

Ile Met Asp Gly Glu Asp Ile Pro Asp Phe Ser Ser Leu Lys Glu Glu  
35 40 45

Thr Ala Tyr Trp Lys Glu Leu Ser Leu Lys Tyr Lys Gln Arg Ala Thr  
50 55 60

Ile Val Ser Leu Glu Asp Phe Glu Gln Arg Leu Asn Gln Ala Ile Glu  
65 70 75 80

Arg Asn Ala Phe Leu Glu Ser Glu Leu Asp Glu Lys Glu Ser Leu Leu  
85 90 95

Val Ser Val Gln Arg Leu Lys Asp Glu Ala Arg Asp Leu Arg Gln Glu  
100 105 110

Leu Ala Val Arg Glu Arg Gln Gln Glu Val Thr Arg Lys Ser Ala Pro  
115 120 125

Ser Ser Pro Thr Leu Asp Cys Glu Lys Met Asp Ser Ala Val Gln Ala  
130 135 140

Ser Leu Ser Leu Pro Ala Thr Pro Val Gly Lys Gly Thr Glu Asn Thr  
145 150 155 160

Phe Pro Ser Pro Lys Ala Ile Pro Asn Gly Phe Gly Thr Ser Pro Leu  
165 170 175

Thr Pro Ser Ala Arg Ile Ser Ala Leu Asn Ile Val Gly Gly Ser Leu  
180 185 190

Thr Glu Ser Arg Gly Phe Arg Ile Gln Ile Ser Ser Leu Gln Glu Phe

195

200

205

Cys Lys Gly Pro Ser Ile Thr Xaa Ile Leu Tyr Phe Arg Glu Cys  
210 215 220

<210> 1617  
<211> 138  
<212> PRT  
<213> Homo sapiens

<400> 1617  
Val Lys Gln Tyr Leu Arg Thr Gly Tyr Lys Gln Tyr Phe Leu Lys Leu  
1 5 10 15  
Ser Pro Ile Phe Pro Pro Met Arg Pro Phe Gln Thr Gln Ile Ser His  
20 25 30  
Asn Arg Ala Arg Thr Ile Ile Thr Ser Pro Asp Ser Glu Pro Glu Cys  
35 40 45  
Phe Pro Gln Asp Cys Val Ala Pro Asn Ala Leu Arg Ser Ile Val Gly  
50 55 60  
Glu Ser Cys His Trp Asp Ser Thr Ser Arg Pro Gly Asp Gln Ala Ser  
65 70 75 80  
Arg Ile Pro Leu Glu Thr Pro Pro Leu Phe His Tyr His Pro Ala Thr  
85 90 95  
Ser Ser Ser Ala Met Pro Trp Phe Pro Leu Glu Ser Ser Gln Ser Gln  
100 105 110  
Arg Arg Pro Pro Thr Thr Ser Lys Ala Ser Lys Val Leu Glu Ser Ala  
115 120 125  
Pro Arg Leu Asn Arg Ala Ser Ile Ser Ser  
130 135

<210> 1618  
<211> 388  
<212> PRT  
<213> Homo sapiens

<400> 1618  
Ala Glu Ser Thr Ala Arg Val Cys Cys Pro Ser Pro Arg Tyr Ala Gln  
1 5 10 15

Ser Arg Arg Ser Pro Ala Trp Gly Glu Gln Ser Asp His Arg Pro Gly  
20 25 30

Ala Ala Arg Arg Asp Ala Arg Cys Ala Leu Cys Pro Arg Ala Pro Thr  
35 40 45

Ala Pro Ala Ala Ala Ala Glu Ala Gln Arg Glu Asn Ala Pro Pro Arg  
50 55 60

Gly Pro Gly Ala Ala Ser Asp Pro Leu Ala Thr Cys Ala Gln Pro Glu  
65 70 75 80

Val Ser Ser Glu Arg Arg Ala Gly Gly Gln Arg Gly Val Arg Gly Pro  
85 90 95

Pro Pro Ala Ala Arg Ala Arg Pro Leu Met Ala Ala Ile Arg Lys Lys  
100 105 110

Leu Val Val Val Gly Asp Gly Ala Cys Gly Lys Thr Cys Leu Leu Ile  
115 120 125

Val Phe Ser Lys Asp Glu Phe Pro Glu Val Tyr Val Pro Thr Val Phe  
130 135 140

Glu Asn Tyr Val Ala Asp Ile Glu Val Asp Gly Lys Gln Val Glu Leu  
145 150 155 160

Ala Leu Trp Asp Thr Ala Gly Gln Glu Asp Tyr Asp Arg Leu Arg Pro  
165 170 175

Leu Ser Tyr Pro Asp Thr Asp Val Ile Leu Met Cys Phe Ser Val Asp  
180 185 190

Ser Pro Asp Ser Leu Glu Asn Ile Pro Glu Lys Trp Val Pro Glu Val  
195 200 205

Lys His Phe Cys Pro Asn Val Pro Ile Ile Leu Val Ala Asn Lys Lys  
210 215 220

Asp Leu Arg Ser Asp Glu His Val Arg Thr Glu Leu Ala Arg Met Lys  
225 230 235 240

Gln Glu Pro Val Arg Thr Asp Asp Gly Arg Ala Met Ala Val Arg Ile  
245 250 255

Gln Ala Tyr Asp Tyr Leu Glu Cys Ser Ala Lys Thr Lys Glu Gly Val  
260 265 270

Arg Glu Val Phe Glu Thr Ala Thr Arg Ala Ala Ala Glu Ala Leu Arg  
275 280 285

Leu Pro Glu Arg Leu His Gln Leu Leu Gln Gly Ala Met Arg Ala Ala  
 290 295 300  
 Pro Val Ala Pro Ala Pro Ala Gly Thr Ala Pro Pro Pro Gly Pro Val  
 305 310 315 320  
 Pro Arg Glu Pro Gly Glu Gly Glu Thr Arg Val Pro Gln Gly Pro His  
 325 330 335  
 Arg Pro Ala Trp His Leu Ser Ala Asp Ala Ser Gly Leu Arg Gln Asp  
 340 345 350  
 Leu Ala Trp Ala Pro Gly Ala Pro Ile Pro Val Ser Val Cys Val Gln  
 355 360 365  
 Leu Cys Cys Thr Gly Leu Gly Ser Pro Leu Ser Ala Lys Gly Pro Leu  
 370 375 380  
 Ser Met Leu Phe  
 385

<210> 1619  
 <211> 184  
 <212> PRT  
 <213> Homo sapiens

<400> 1619  
 Val Pro Val Arg Asn Ser Arg Val Asp Pro Arg Val Arg Gly Thr Arg  
 1 5 10 15  
 Gly Arg Thr Arg Gly Arg Glu Gly Arg Ser Leu Trp Arg Lys Met Ala  
 20 25 30  
 Ala Ala Trp Gly Ser Ser Leu Thr Ala Ala Thr Gln Arg Ala Val Thr  
 35 40 45  
 Pro Trp Pro Arg Gly Arg Leu Leu Thr Ala Ser Leu Gly Pro Gln Ala  
 50 55 60  
 Arg Arg Glu Ala Ser Ser Ser Ser Pro Glu Ala Gly Glu Gly Gln Ile  
 65 70 75 80  
 Arg Leu Thr Asp Ser Cys Val Gln Arg Leu Leu Glu Ile Thr Glu Gly  
 85 90 95  
 Ser Glu Phe Leu Arg Leu Gln Val Glu Gly Gly Gly Cys Ser Gly Phe  
 100 105 110  
 Gln Tyr Lys Phe Ser Leu Asp Thr Val Ile Asn Pro Asp Asp Arg Val



Pro Pro Lys Arg Arg Gln Lys Arg Asp Thr Thr His Asn Leu Pro Glu  
145 150 155 160

Phe Ile Val Lys Phe Gly Ser Arg Glu Trp Val Leu Gly Arg Val Glu  
165 170 175

Tyr Asp Thr Arg Val Ser Asp Val Pro Leu Ser Leu Ile Leu Pro Leu  
180 185 190

Val Ile Val Pro Met Val Val Val Ile Ala Val Ser Val Tyr Cys Tyr  
195 200 205

Trp Arg Lys Ser Gln Gln Ala Glu Arg Glu Tyr Glu Lys Ile Lys Ser  
210 215 220

Gln Leu Glu Gly Leu Glu Glu Ser Val Arg Asp Arg Cys Lys Lys Glu  
225 230 235 240

Phe Thr Asp Leu Met Ile Glu Met Glu Asp Gln Thr Asn Asp Val His  
245 250 255

Glu Ala Gly Ile Pro Val Leu Asp Tyr Lys Thr Tyr Thr Asp Arg Val  
260 265 270

Phe Phe Leu Pro Ser Lys Asp Gly Asp Lys Asp Val Met Ile Thr Gly  
275 280 285

Lys Leu Asp Ile Pro Glu Pro Arg Arg Pro Val Val Glu Gln Ala Leu  
290 295 300

Tyr Gln Phe Ser Asn Leu Leu Asn Ser Lys Ser Phe Leu Ile Asn Phe  
305 310 315 320

Ile His Thr Leu Glu Asn Gln Arg Glu Phe Ser Ala Arg Ala Lys Val  
325 330 335

Tyr Phe Ala Ser Leu Leu Thr Val Ala Leu His Gly Lys Leu Glu Tyr  
340 345 350

Tyr Thr Asp Ile Met His Thr Leu Phe Leu Glu Leu Leu Glu Gln Tyr  
355 360 365

Val Val Ala Lys Asn Pro Lys Leu Met Leu Arg Arg Ser Glu Thr Val  
370 375 380

Val Glu Arg Met Leu Ser Asn Trp Met Ser Ile Leu Xaa Pro Ile  
385 390 395

<211> 189  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (61)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (154)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 1623  
 Ile Tyr Asp Phe Arg Thr Gly Met Arg Leu Lys Lys Glu Glu Lys Ser  
     1                    5                    10                    15  
 Arg Gln Glu Leu Glu Lys Leu Lys Arg Lys Leu Glu Gly Asp Ala Ser  
             20                    25                    30  
 Asp Phe His Glu Gln Ile Ala Asp Leu Gln Ala Gln Ile Ala Glu Leu  
             35                    40                    45  
 Lys Met Gln Leu Ala Lys Lys Glu Glu Glu Leu Gln Xaa Ala Leu Ala  
     50                    55                    60  
 Arg Leu Asp Asp Glu Ile Leu Gln Lys Asn Asn Ala Leu Lys Lys Ile  
     65                    70                    75                    80  
 Arg Glu Leu Glu Gly His Ile Ser Asp Leu Gln Glu Asp Leu Asp Ser  
             85                    90                    95  
 Glu Arg Ala Ala Arg Asn Lys Ala Glu Lys Gln Lys Arg Asp Leu Gly  
             100                    105                    110  
 Glu Glu Leu Glu Ala Leu Lys Thr Glu Leu Glu Asp Thr Leu Asp Ser  
     115                    120                    125  
 Thr Ala Thr Gln Gln Glu Leu Arg Ala Lys Arg Glu Gln Glu Val Thr  
     130                    135                    140  
 Val Leu Lys Lys Ala Leu Asp Glu Glu Xaa Arg Ser His Glu Ala Gln  
     145                    150                    155                    160  
 Val Gln Glu Met Arg Gln Lys His Ala Gln Ala Val Glu Glu Leu Lys  
             165                    170                    175  
 Gln Arg Ala Gly His Arg Ala His Thr Gly Pro Glu Glu  
             180                    185

&lt;210&gt; 1624

&lt;211&gt; 276

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1624

Leu Ile Ser Pro Val Trp Gly Asn Ile Gln Arg Ser Arg Ser Val Pro  
 1 5 10 15

Leu Phe Pro Ser Gly Leu Val Leu Gly Gly Ile Trp Ala Arg Gly Pro  
 20 25 30

Leu Leu Ala Leu Leu Ala Ser Phe Asn Ile Ile Ser Val Leu Asn Ala  
 35 40 45

Glu Cys Tyr Leu Lys Gln Ile Leu His Pro Thr Ser His Phe Thr Val  
 50 55 60

Ser Glu Thr Pro Pro Leu Ser Gly Asn Asp Thr Asp Ser Leu Ser Cys  
 65 70 75 80

Asp Ser Gly Ser Ser Ala Thr Ser Thr Pro Cys Val Ser Arg Leu Val  
 85 90 95

Thr Gly His His Leu Trp Ala Ser Lys Asn Gly Arg His Val Leu Gly  
 100 105 110

Leu Ile Glu Asp Tyr Glu Ala Leu Leu Lys Gln Ile Ser Gln Gly Gln  
 115 120 125

Arg Leu Leu Ala Glu Met Asp Ile Gln Thr Gln Glu Ala Pro Ser Ser  
 130 135 140

Thr Ser Gln Glu Leu Gly Thr Lys Gly Pro His Pro Ala Pro Leu Ser  
 145 150 155 160

Lys Phe Val Ser Ser Val Ser Thr Ala Lys Leu Thr Leu Glu Glu Ala  
 165 170 175

Tyr Arg Arg Leu Lys Leu Leu Trp Arg Val Ser Leu Pro Glu Asp Gly  
 180 185 190

Gln Cys Pro Leu His Cys Glu Gln Ile Gly Glu Met Lys Ala Glu Val  
 195 200 205

Thr Lys Leu His Lys Lys Leu Phe Glu Gln Glu Lys Lys Leu Gln Asn  
 210 215 220

Thr Met Lys Leu Leu Gln Leu Ser Lys Arg Gln Glu Lys Val Ile Phe

225                      230                      235                      240  
Asp Gln Leu Val Val Thr His Lys Ile Leu Arg Lys Ala Arg Gly Asn  
                         245                      250                      255  
Leu Glu Leu Arg Pro Gly Gly Ala His Pro Gly Thr Cys Ser Pro Ser  
                         260                      265                      270  
Arg Pro Gly Ser  
                         275

<210> 1625  
<211> 133  
<212> PRT  
<213> Homo sapiens

<400> 1625  
Gln Ser Ala Val Gly Asn Thr Ala Thr Thr Leu Pro Trp Gln Gly Pro  
1                      5                      10                      15  
Glu Ser Ile Ser Gly Gly Ala Ala His Val Cys Met Cys Cys Val Ser  
                         20                      25                      30  
Glu His Thr Arg Val His Thr His Thr His Val His Thr His Ala Leu  
                         35                      40                      45  
Ser Pro Leu Arg Gly Leu Glu Val Trp Leu Ser Pro Trp Gly Lys Val  
                         50                      55                      60  
Ser Ser Phe Ile Ser Leu Leu Gln Val Gly Val Pro Gly Val Arg Cys  
65                      70                      75                      80  
Arg Gly His Ile Ala Gly Cys Pro Leu Phe Val Ala Pro Ile Lys Gly  
                         85                      90                      95  
Pro His Leu Val Asp Thr Trp Leu Ser Val Trp Ser Leu Pro Gln Pro  
                         100                      105                      110  
Val Leu Val Thr Ile Thr Gly Leu Ala Phe Val Thr Met Met Thr Pro  
                         115                      120                      125  
Ala Cys Leu Ile Phe  
                         130

<210> 1626  
<211> 677  
<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (11)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (339)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (538)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (544)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1626

Ser Ser Gly Met Ala Leu Ala Val Ala Ala Xaa Ala Glu Ala Gln Ala  
1 5 10 15

Ala Arg Pro Gln Trp Arg Leu Glu Pro Glu Arg Arg Arg Arg Arg His  
20 25 30

Pro Gly Glu Phe Lys Met Ala Ala Gly Gly Thr Gly Gly Leu Arg Glu  
35 40 45

Glu Gln Arg Tyr Gly Leu Ser Cys Gly Arg Leu Gly Gln Asp Asn Ile  
50 55 60

Thr Val Leu His Val Lys Leu Thr Glu Thr Ala Ile Arg Ala Leu Glu  
65 70 75 80

Thr Tyr Gln Ser His Lys Asn Leu Ile Pro Phe Arg Pro Ser Ile Gln  
85 90 95

Phe Gln Gly Leu His Gly Leu Val Lys Ile Pro Lys Asn Asp Pro Leu  
100 105 110

Asn Glu Val His Asn Phe Asn Phe Tyr Leu Ser Asn Val Gly Lys Asp  
115 120 125

Asn Pro Gln Gly Ser Phe Asp Cys Ile Gln Gln Thr Phe Ser Ser Ser  
130 135 140

Gly Ala Ser Gln Leu Asn Cys Leu Gly Phe Ile Gln Asp Lys Ile Thr

145                      150                      155                      160  
 Val Cys Ala Thr Asn Asp Ser Tyr Gln Met Thr Arg Glu Arg Met Thr  
                                  165                      170                      175  
 Gln Ala Glu Glu Glu Ser Arg Asn Arg Ser Thr Lys Val Ile Lys Pro  
                                  180                      185                      190  
 Gly Gly Pro Tyr Val Gly Lys Arg Val Gln Ile Arg Lys Ala Pro Gln  
                                  195                      200                      205  
 Ala Val Ser Asp Thr Val Pro Glu Arg Lys Arg Ser Thr Pro Met Asn  
                                  210                      215                      220  
 Pro Ala Asn Thr Ile Arg Lys Thr His Ser Ser Ser Thr Ile Ser Gln  
 225                                   230                      235                      240  
 Arg Pro Tyr Arg Asp Arg Val Ile His Leu Leu Ala Leu Lys Ala Tyr  
                                  245                      250                      255  
 Lys Lys Pro Glu Leu Leu Ala Arg Leu Gln Lys Asp Gly Val Asn Gln  
                                  260                      265                      270  
 Lys Asp Lys Asn Ser Leu Gly Ala Ile Leu Gln Gln Val Ala Asn Leu  
                                  275                      280                      285  
 Asn Ser Lys Asp Leu Ser Tyr Thr Leu Lys Asp Tyr Val Phe Lys Glu  
                                  290                      295                      300  
 Leu Gln Arg Asp Trp Pro Gly Tyr Ser Glu Ile Asp Arg Arg Ser Leu  
 305                                   310                      315                      320  
 Glu Ser Val Leu Ser Arg Lys Leu Asn Pro Ser Gln Asn Ala Thr Gly  
                                  325                      330                      335  
 Thr Ser Xaa Ser Glu Ser Pro Val Cys Ser Ser Arg Asp Ala Val Ser  
                                  340                      345                      350  
 Ser Pro Gln Lys Arg Leu Leu Asp Ser Glu Phe Ile Asp Pro Leu Met  
                                  355                      360                      365  
 Asn Lys Lys Ala Arg Ile Ser His Leu Thr Asn Arg Val Pro Pro Thr  
                                  370                      375                      380  
 Leu Asn Gly His Leu Asn Pro Thr Ser Glu Lys Ser Ala Ala Gly Leu  
 385                                   390                      395                      400  
 Pro Leu Pro Pro Ala Ala Ala Ile Pro Thr Pro Pro Pro Leu Pro  
                                  405                      410                      415  
 Ser Thr Tyr Leu Pro Ile Ser His Pro Pro Gln Ile Val Asn Ser Asn

420	425	430
Ser Asn Ser Pro Ser Thr Pro Glu Gly Arg Gly Thr Gln Asp Leu Pro		
435	440	445
Val Asp Ser Phe Ser Gln Asn Asp Ser Ile Tyr Glu Asp Gln Gln Asp		
450	455	460
Lys Tyr Thr Ser Arg Thr Ser Leu Glu Thr Leu Pro Pro Gly Ser Val		
465	470	475
480		
Leu Leu Lys Cys Pro Lys Pro Met Glu Glu Asn His Ser Met Ser His		
485	490	495
Lys Lys Ser Lys Lys Lys Ser Lys Lys His Lys Glu Lys Asp Gln Ile		
500	505	510
Lys Lys His Asp Ile Glu Thr Ile Glu Glu Lys Glu Glu Asp Leu Lys		
515	520	525
Arg Glu Glu Glu Ile Ala Lys Leu Asn Xaa Ser Ser Pro Asn Ser Xaa		
530	535	540
Gly Gly Val Lys Glu Asp Cys Thr Ala Ser Met Glu Pro Ser Ala Ile		
545	550	555
560		
Glu Leu Pro Asp Tyr Leu Ile Lys Tyr Ile Ala Ile Val Ser Tyr Glu		
565	570	575
Gln Arg Gln Asn Tyr Lys Asp Asp Phe Asn Ala Glu Tyr Asp Glu Tyr		
580	585	590
Arg Ala Leu His Ala Arg Met Glu Thr Val Ala Arg Arg Phe Ile Lys		
595	600	605
Leu Asp Ala Gln Arg Lys Arg Leu Ser Pro Gly Ser Lys Glu Tyr Gln		
610	615	620
Asn Val His Glu Glu Val Leu Gln Glu Tyr Gln Lys Ile Lys Gln Ser		
625	630	635
640		
Ser Pro Asn Tyr His Glu Glu Lys Tyr Arg Cys Glu Tyr Leu His Asn		
645	650	655
Lys Leu Ala His Ile Lys Arg Leu Ile Gly Glu Phe Asp Gln Gln Gln		
660	665	670
Ala Glu Ser Trp Ser		
675		

<210> 1627  
<211> 124  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (58)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (108)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (123)  
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1627  
Gly Pro Trp Gly Gly Phe Glu Leu Ser Arg Leu Cys Pro Tyr Arg Leu  
1 5 10 15  
Pro Arg His Thr Arg Ser Val Phe Pro Leu Ser Pro Pro Ser Arg Ala  
20 25 30  
Gly Pro Ser Gly Ile Glu Gly Ala Gly Ser Pro Arg Thr Arg Ala Gln  
35 40 45  
Lys Ser Pro Thr Gly Ser Cys Ile Phe Xaa Arg Thr Ile Pro Gly Ala  
50 55 60  
Leu Arg Gly Val Ser Gly Glu Thr Gly His Arg Gln Ser His Gly Pro  
65 70 75 80  
Pro Pro Lys Ala Gln Ala Pro Pro Ala Pro Pro His Pro Ser Ser Leu  
85 90 95  
Thr His Ala Ala Ser Pro Pro Pro Cys Arg Cys Xaa Gly Gln Ser Pro  
100 105 110  
Val Arg Pro Lys Thr Gly Leu Val Pro Gly Xaa Ala  
115 120

<210> 1628  
<211> 277  
<212> PRT



<213> Homo sapiens

<220>

<221> SITE

<222> (176)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1628

Thr His Val Val Arg His Ala Tyr Arg Ser Tyr Phe Thr Phe Ile Gly  
1 5 10 15

Arg Val Ala Gly Leu Ala Val Phe His Gly Lys Leu Leu Asp Gly Phe  
20 25 30

Phe Ile Arg Pro Phe Tyr Lys Met Met Leu Gly Lys Gln Ile Thr Leu  
35 40 45

Asn Asp Met Glu Ser Val Asp Ser Glu Tyr Tyr Asn Ser Leu Lys Trp  
50 55 60

Ile Leu Glu Asn Asp Pro Thr Glu Leu Asp Leu Met Phe Cys Ile Asp  
65 70 75 80

Glu Glu Asn Phe Gly Gln Thr Tyr Gln Val Asp Leu Lys Pro Asn Gly  
85 90 95

Ser Glu Ile Met Val Thr Asn Glu Asn Lys Arg Glu Tyr Ile Asp Leu  
100 105 110

Val Ile Gln Trp Arg Phe Val Asn Arg Val Gln Lys Gln Met Asn Ala  
115 120 125

Phe Leu Glu Gly Phe Thr Glu Leu Leu Pro Ile Asp Leu Ile Lys Ile  
130 135 140

Phe Asp Glu Asn Glu Leu Glu Leu Leu Met Cys Gly Leu Gly Asp Val  
145 150 155 160

Asp Val Asn Asp Trp Arg Gln His Ser Ile Tyr Lys Asn Gly Tyr Xaa  
165 170 175

Pro Asn His Pro Val Ile Gln Trp Phe Trp Lys Ala Val Leu Leu Met  
180 185 190

Asp Ala Glu Lys Arg Ile Arg Leu Leu Gln Phe Val Thr Gly Thr Ser  
195 200 205

Arg Val Pro Met Asn Gly Phe Ala Glu Leu Tyr Gly Ser Asn Gly Pro  
210 215 220

Gln Leu Phe Thr Ile Glu Gln Trp Gly Ser Pro Glu Lys Leu Pro Arg

[illegible]

<210> 1629

<211> 135

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (7)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1629

Gly Ala Val Gly Gly Arg Xaa Gly Gly Arg Tyr Ala Gly Arg His Val  
1 5 10 15

Ser Arg Val Arg Ala Leu Tyr Lys Arg Val Leu Gln Leu His Arg Val  
20 25 30

Leu Pro Pro Asp Leu Lys Ser Leu Gly Asp Gln Tyr Val Lys Asp Glu  
35 40 45

Phe Arg Arg His Lys Thr Val Gly Ser Asp Glu Ala Gln Arg Phe Leu  
50 55 60

Gln Glu Trp Glu Val Tyr Ala Thr Ala Leu Leu Gln Gln Ala Asn Glu  
65 70 75 80

Asn Arg Gln Asn Ser Thr Gly Lys Ala Cys Phe Gly Thr Phe Leu Pro  
85 90 95

Glu Glu Lys Leu Asn Asp Phe Arg Asp Glu Gln Ile Gly Gln Leu Gln  
100 105 110

Glu Leu Met Gln Glu Ala Thr Lys Pro Asn Arg Gln Phe Ser Ile Ser  
115 120 125

Glu Ser Met Lys Pro Lys Phe  
130 135

<210> 1630  
 <211> 233  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (32)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (33)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (195)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (222)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (223)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (227)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (231)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 1630  
 Met Cys Pro Ser Cys Ser Pro Cys Gly Met Asp Trp Val Val Glu Thr  
 1 5 10 15

Met Pro Gln Gly Val Cys Gly Met Ser Pro Ser Val Trp Ser Val Xaa  
 20 25 30

Xaa Glu Thr Val Arg Gly Leu Leu His His Pro Thr Leu Pro Asn  
 35 40 45

Pro Tyr Thr Met Ala Val Ala Ala Arg Val Thr Ala Ala Thr Thr Val  
50 55 60

Thr His Ile Thr Ala Phe Asp Pro Asp Ser Thr Gly Gln Gln Val Trp  
65 70 75 80

Gln Asp Leu Leu Gln Asp Gly Gln Leu Asp Ser Pro Thr Gly Gln Ser  
85 90 95

Thr Pro Thr Gln Lys Gly Val Gly Ile Ala Gly Ala Val Cys Val Ser  
100 105 110

Ser Lys Leu Arg Pro Arg Gly Gln Cys Arg Leu Glu Phe Ser Leu Ala  
115 120 125

Trp Asp Met Pro Arg Ile Met Phe Gly Ala Lys Gly Gln Val His Tyr  
130 135 140

Arg Arg Tyr Thr Arg Phe Phe Gly Gln Asp Gly Asp Ala Ala Pro Ala  
145 150 155 160

Leu Ser His Tyr Ala Leu Cys Arg Tyr Ala Glu Trp Glu Glu Arg Ile  
165 170 175

Ser Ala Trp Gln Ser Pro Val Leu Asp Asp Arg Ser Leu Pro Ala Trp  
180 185 190

Tyr Lys Xaa Ala Leu Phe Asn Glu Leu Tyr Phe Leu Ala Asp Gly Gly  
195 200 205

Thr Val Trp Leu Glu Val Leu Glu Asp Ile Gln Asp Lys Xaa Xaa Phe  
210 215 220

Tyr Pro Xaa Arg Gly Gln Xaa Ala Tyr  
225 230

<210> 1631

<211> 153

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (9)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

&lt;222&gt; (118)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1631

Trp Gly Pro Arg Leu Pro Pro Pro Xaa Lys Lys Ala Leu Leu Ala Leu  
 1 5 10 15

Lys Lys Gln Ser Ser Ser Thr Thr Ser Gln Gly Gly Val Lys Arg  
 20 25 30

Ser Leu Ser Glu Gln Pro Val Met Asp Thr Ala Thr Ala Thr Glu Gln  
 35 40 45

Ala Lys Gln Leu Val Lys Ser Gly Ala Ile Ser Ala Ile Lys Ala Glu  
 50 55 60

Thr Lys Asn Ser Gly Phe Lys Arg Ser Arg Thr Leu Glu Gly Lys Leu  
 65 70 75 80

Lys Asp Pro Glu Lys Gly Pro Val Pro Thr Phe Gln Pro Phe Gln Arg  
 85 90 95

Ser Ile Ser Ala Asp Asp Asp Leu Gln Glu Ser Ser Arg Arg Pro Gln  
 100 105 110

Arg Lys Ser Leu Tyr Xaa Ser Ser Leu Ala Val Gln Asn Ser Pro Lys  
 115 120 125

Gly Cys His Arg Asp Lys Arg Thr Gln Ile Val Tyr Ser Asp Asp Val  
 130 135 140

Tyr Lys Glu Asn Leu Val Asp Gly Phe  
 145 150

&lt;210&gt; 1632

&lt;211&gt; 224

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1632

Pro Thr Arg Cys Gly Ala Ser Gly Ser Arg Pro Pro Ser Gly Ser Asp  
 1 5 10 15

Pro Ala Asn Gly Phe Gly Tyr Ile Phe Met Leu Gly Phe Ile Thr Arg  
 20 25 30

Pro Pro His Arg Phe Leu Ser Leu Leu Cys Pro Gly Leu Arg Ile Pro  
 35 40 45

Gln Leu Ser Val Leu Cys Ala Gln Pro Arg Pro Arg Ala Met Ala Ile  
 50 55 60  
 Ser Ser Ser Ser Cys Glu Leu Pro Leu Val Ala Val Cys Gln Val Thr  
 65 70 75 80  
 Ser Thr Pro Asp Lys Gln Gln Asn Phe Lys Thr Cys Ala Glu Leu Val  
 85 90 95  
 Arg Glu Ala Ala Arg Leu Gly Ala Cys Leu Ala Phe Leu Pro Glu Ala  
 100 105 110  
 Phe Asp Phe Ile Ala Arg Asp Pro Ala Glu Thr Leu His Leu Ser Glu  
 115 120 125  
 Pro Leu Gly Gly Lys Leu Leu Glu Glu Tyr Thr Gln Leu Ala Arg Glu  
 130 135 140  
 Cys Gly Leu Trp Leu Ser Leu Gly Gly Phe His Glu Arg Gly Gln Asp  
 145 150 155 160  
 Trp Glu Gln Thr Gln Lys Ile Tyr Asn Cys His Val Leu Leu Asn Ser  
 165 170 175  
 Lys Gly Ala Val Val Ala Thr Tyr Arg Lys Thr His Leu Cys Asp Val  
 180 185 190  
 Glu Ile Pro Gly Gln Gly Leu Cys Val Lys Ala Thr Leu Pro Cys Leu  
 195 200 205  
 Gly Pro Val Leu Ser His Leu Ser Ala His Gln Gln Ala Arg Leu Val  
 210 215 220

&lt;210&gt; 1633

&lt;211&gt; 668

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1633

Thr Ile Asn Gly Val Ile Leu Ile Ser Val Phe Phe Ser Phe Phe Phe  
 1 5 10 15

Leu His Pro Met Leu Ser Val Val Val Cys Val Val Gly Leu Ser Pro  
 20 25 30

Gly Gln Tyr Phe Tyr Phe Gln Glu Val Phe Pro Val Leu Ala Ala Lys

35	40	45
His Cys Ile Met Gln Ala Asn Ala Glu Tyr His Gln Ser Ile Leu Ala		
50	55	60
Lys Gln Gln Lys Lys Phe Gly Glu Glu Ile Ala Arg Leu Gln His Ala		
65	70	75
Ala Glu Leu Ile Lys Thr Val Ala Ser Arg Tyr Asp Glu Tyr Val Asn		
85	90	95
Val Lys Asp Phe Ser Asp Lys Ile Asn Arg Ala Leu Ala Ala Ala Lys		
100	105	110
Lys Asp Asn Asp Phe Ile Tyr His Asp Arg Val Pro Asp Leu Lys Asp		
115	120	125
Leu Asp Pro Ile Gly Lys Ala Thr Leu Val Lys Ser Thr Pro Val Asn		
130	135	140
Val Pro Ile Ser Gln Lys Phe Thr Asp Leu Phe Glu Lys Met Val Pro		
145	150	155
Val Ser Val Gln Gln Ser Leu Ala Ala Tyr Asn Gln Arg Lys Ala Asp		
165	170	175
Leu Val Asn Arg Ser Ile Ala Gln Met Arg Glu Ala Thr Thr Leu Ala		
180	185	190
Asn Gly Val Leu Ala Ser Leu Asn Leu Pro Ala Ala Ile Glu Asp Val		
195	200	205
Ser Gly Asp Thr Val Pro Gln Ser Ile Leu Thr Lys Ser Arg Ser Val		
210	215	220
Ile Glu Gln Gly Gly Ile Gln Thr Val Asp Gln Leu Ile Lys Glu Leu		
225	230	235
Pro Glu Leu Leu Gln Arg Asn Arg Glu Ile Leu Asp Glu Ser Leu Arg		
245	250	255
Leu Leu Asp Glu Glu Glu Ala Thr Asp Asn Asp Leu Arg Ala Lys Phe		
260	265	270
Lys Glu Arg Trp Gln Arg Thr Pro Ser Asn Glu Leu Tyr Lys Pro Leu		
275	280	285
Arg Ala Glu Gly Thr Asn Phe Arg Thr Val Leu Asp Lys Ala Val Gln		
290	295	300
Ala Asp Gly Gln Val Lys Glu Cys Tyr Gln Ser His Arg Asp Thr Ile		

305	310	315	320
Val Leu Leu Cys Lys Pro Glu Pro Glu Leu Asn Ala Ala Ile Pro Ser			
325		330	335
Ala Asn Pro Ala Lys Thr Met Gln Gly Ser Glu Val Val Asn Val Leu			
340	345		350
Lys Ser Leu Leu Ser Asn Leu Asp Glu Val Lys Lys Glu Arg Glu Gly			
355	360		365
Leu Glu Asn Asp Leu Lys Ser Val Asn Phe Asp Met Thr Ser Lys Phe			
370	375	380	
Leu Thr Ala Leu Ala Gln Asp Gly Val Ile Asn Glu Glu Ala Leu Ser			
385	390	395	400
Val Thr Glu Leu Asp Arg Val Tyr Gly Gly Leu Thr Thr Lys Val Gln			
405	410		415
Glu Ser Leu Lys Lys Gln Glu Gly Leu Leu Lys Asn Ile Gln Val Ser			
420	425		430
His Gln Glu Phe Ser Lys Met Lys Gln Ser Asn Asn Glu Ala Asn Leu			
435	440	445	
Arg Glu Glu Val Leu Lys Asn Leu Ala Thr Ala Tyr Asp Asn Phe Val			
450	455	460	
Glu Leu Val Ala Asn Leu Lys Glu Gly Thr Lys Phe Tyr Asn Glu Leu			
465	470	475	480
Thr Glu Ile Leu Val Arg Phe Gln Asn Lys Cys Ser Asp Ile Val Phe			
485	490		495
Ala Arg Lys Thr Glu Arg Asp Glu Leu Leu Lys Asp Leu Gln Gln Ser			
500	505		510
Ile Ala Arg Glu Pro Ser Ala Pro Ser Ile Pro Thr Pro Ala Tyr Gln			
515	520	525	
Ser Ser Pro Ala Gly Gly His Ala Pro Thr Pro Pro Thr Pro Ala Pro			
530	535	540	
Arg Thr Met Pro Pro Thr Lys Pro Gln Pro Pro Ala Arg Pro Pro Pro			
545	550	555	560
Pro Val Leu Pro Ala Asn Arg Ala Pro Ser Ala Thr Ala Pro Ser Pro			
565	570		575
Val Gly Ala Gly Thr Ala Ala Pro Ala Pro Ser Gln Thr Pro Gly Ser			



580	585	590
Ala Pro Pro Pro Gln Ala Gln Gly Pro Pro Tyr Pro Thr Tyr Pro Gly		
595	600	605
Tyr Pro Gly Tyr Cys Gln Met Pro Met Pro Met Gly Tyr Asn Pro Tyr		
610	615	620
Ala Tyr Gly Gln Tyr Asn Met Pro Tyr Pro Pro Val Tyr His Gln Ser		
625	630	635 640
Pro Gly Gln Ala Pro Tyr Pro Gly Pro Gln Gln Pro Ser Tyr Pro Phe		
645	650	655
Pro Gln Pro Pro Gln Gln Ser Tyr Tyr Pro Gln Gln		
660	665	

&lt;210&gt; 1634

&lt;211&gt; 99

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (64)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (75)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (78)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (81)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1634

Gly	Glu	Ala	Ala	Lys	Met	Ser	Ser	Glu	Pro	Pro	Pro	Pro	Tyr	Pro	Gly
1				5					10					15	

Gly	Pro	Thr	Ala	Pro	Leu	Leu	Glu	Glu	Lys	Ser	Gly	Ala	Pro	Pro	Thr
			20					25						30	

Pro Gly Arg Ser Ser Pro Ala Val Met Gln Pro Pro Pro Gly Met Pro  
35 40 45

Leu Pro Pro Ala Asp Ile Gly Pro Pro Pro Tyr Glu Pro Pro Gly Xaa  
50 55 60

Pro Met Pro Gln Pro Gly Phe Ile Pro Pro Xaa Met Ser Xaa Asp Gly  
65 70 75 80

Xaa Tyr Met Pro Pro Gly Phe Leu Pro Phe Phe Arg Gly Pro His Pro  
85 90 95

Pro Leu Gly

<210> 1635  
<211> 74  
<212> PRT  
<213> Homo sapiens

<400> 1635  
Gly Glu Ala Ala Phe Cys Pro Ser Pro His Ser His Leu Ile Tyr Leu  
1 5 10 15

Ile Gln Ser Gln Leu Leu Lys Phe Gly Lys Asp Gln Ile Ala Leu Gln  
20 25 30

Phe Phe Ser Leu Cys Ser Ile Leu Lys Ser Trp Lys Ile Leu Trp Asn  
35 40 45

Ser Ser Val Tyr Arg Ala Gln Val Lys Ala Leu Ser Lys Val Tyr Leu  
50 55 60

Phe Ile Tyr Tyr Pro Lys Asn Ala Leu Pro  
65 70

<210> 1636  
<211> 67  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (48)  
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1636

Arg His Arg Ser Val Ser Thr Pro Arg Ala Gly Gly Ile Val Trp Phe  
1 5 10 15  
His Glu Gly Leu Lys Ser Val Ile Pro Lys Val Gly Leu Gln Ala Ala  
20 25 30  
Ala Pro Ser Ile Cys Val Phe Leu Ser Gly Thr Val Gly Leu Tyr Xaa  
35 40 45  
Arg Leu Thr Cys Phe Gly Ser Arg Gly Ile Ile Leu Gly Phe Gly Lys  
50 55 60  
Thr His Phe  
65

&lt;210&gt; 1637

&lt;211&gt; 64

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (21)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1637

Thr Phe Ile Tyr Val Gly Leu Tyr Leu Thr Ile Cys Asn Phe Lys Val  
1 5 10 15  
Met Leu Gly Gln Xaa Asn Val Ser Ala Ser Arg Ile Ala Ile Lys Tyr  
20 25 30  
His Thr Lys Phe Gly Gly Arg Thr Asp Leu Cys Tyr Lys Glu Met Glu  
35 40 45  
Lys Ser Ser Leu Cys His Gly Asp Glu Lys Pro Ala Ser His Ser Asn  
50 55 60

&lt;210&gt; 1638

&lt;211&gt; 93

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (90)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1638

Gln Arg Gly Asp Ser Ala Asp Thr Ala Ser Leu Arg Phe Asn Thr Pro  
 1 5 10 15

Ser Phe Asp Leu Ser Cys Pro His Tyr Pro Arg Lys Ile Gln Ser Ser  
 20 25 30

Phe Gln Ser Ile Leu Ile Asn Pro Leu Asp Pro Lys Phe Arg Glu Val  
 35 40 45

Pro Leu Pro Ser Ser Leu Leu Pro Gly Pro Thr Glu Glu His Pro Thr  
 50 55 60

Thr Leu His Gln Leu Leu Lys Thr His Lys Gly Lys Ile Pro Thr Gly  
 65 70 75 80

Pro Cys Gln Glu Val Val Glu Leu Pro Xaa Arg Phe His  
 85 90

&lt;210&gt; 1639

&lt;211&gt; 222

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1639

His Glu Leu Asn Cys Lys Asp Ala Val Ser Arg Lys Arg Ser His Ser  
 1 5 10 15

Ala Ser Glu Lys Ser Gly Thr Gly Thr Ser Ile Ser Lys Arg Leu Asn  
 20 25 30

Met Asn Pro Gln Ile Arg Asn Pro Met Lys Ala Met Tyr Pro Gly Thr  
 35 40 45

Phe Tyr Phe Gln Phe Lys Asn Leu Trp Glu Ala Asn Asp Arg Asn Glu  
 50 55 60

Thr Trp Leu Cys Phe Thr Val Glu Gly Ile Lys Arg Arg Ser Val Val  
 65 70 75 80

Ser Trp Lys Thr Gly Val Phe Arg Asn Gln Val Asp Ser Glu Thr His  
 85 90 95

Cys His Ala Glu Arg Cys Phe Leu Ser Trp Phe Cys Asp Asp Ile Leu  
 100 105 110

Ser Pro Asn Thr Lys Tyr Gln Val Thr Trp Tyr Thr Ser Trp Ser Pro  
 115 120 125

Cys Pro Asp Cys Ala Gly Glu Val Ala Glu Phe Leu Ala Arg His Ser  
 130 135 140

Asn Val Asn Leu Thr Ile Phe Thr Ala Arg Leu Tyr Tyr Phe Gln Tyr  
 145 150 155 160

Pro Cys Tyr Gln Glu Gly Leu Arg Ser Leu Ser Gln Glu Gly Val Ala  
 165 170 175

Val Glu Ile Met Asp Tyr Glu Asp Phe Lys Tyr Cys Trp Glu Asn Phe  
 180 185 190

Val Tyr Asn Asp Asn Glu Pro Phe Lys Pro Trp Lys Gly Leu Lys Thr  
 195 200 205

Asn Phe Arg Leu Leu Lys Arg Arg Leu Arg Glu Ser Leu Gln  
 210 215 220

<210> 1640

<211> 436

<212> PRT

<213> Homo sapiens

<400> 1640

Gly Leu Lys Arg Val Ser Ala Thr Ala Ala His Arg Asn Ala Leu Gln  
 1 5 10 15

Asn Pro Lys Gln Gly Gly Thr Gln Leu Lys Thr Glu Lys Ile His Met  
 20 25 30

Phe Leu Leu Ala Pro Val Ala Thr Gly Ile Asn Ser His Asn Asp Arg  
 35 40 45

Gly Arg Gly Ile Gln Gly Thr Ile Asn Glu Gln Cys Ala Ser Ser Leu  
 50 55 60

Lys Ile Arg Ala Ser His Gly Thr Lys Met Met Thr Pro Glu Val Leu  
 65 70 75 80

Ala Glu Ala Tyr Gly Lys Lys Glu Trp Lys His Phe Leu Ser Asp Thr  
 85 90 95

Gly Met Ala Cys Arg Ser Gly Lys Tyr Tyr Phe Tyr Asp Asn Tyr Phe  
 100 105 110

Asp Leu Pro Gly Ala Leu Leu Cys Ala Arg Val Val Asp Tyr Leu Thr  
115 120 125

Lys Leu Asn Asn Gly Gln Lys Thr Phe Asp Phe Trp Lys Asp Ile Val  
130 135 140

Ala Ala Ile Gln His Asn Tyr Lys Met Ser Ala Phe Lys Glu Asn Cys  
145 150 155 160

Gly Ile Tyr Phe Pro Glu Ile Lys Arg Asp Pro Gly Arg Tyr Leu His  
165 170 175

Ser Cys Pro Glu Ser Val Lys Lys Trp Leu Arg Gln Leu Lys Asn Ala  
180 185 190

Gly Lys Ile Leu Leu Leu Ile Thr Ser Ser His Ser Asp Tyr Cys Arg  
195 200 205

Leu Leu Cys Glu Tyr Ile Leu Gly Asn Asp Phe Thr Asp Leu Phe Asp  
210 215 220

Ile Val Ile Thr Asn Ala Leu Lys Pro Gly Phe Phe Ser His Leu Pro  
225 230 235 240

Ser Gln Arg Pro Phe Arg Thr Leu Glu Asn Asp Glu Glu Gln Glu Ala  
245 250 255

Leu Pro Ser Leu Asp Lys Pro Gly Trp Tyr Ser Gln Gly Asn Ala Val  
260 265 270

His Leu Tyr Glu Leu Leu Lys Lys Met Thr Gly Lys Pro Glu Pro Lys  
275 280 285

Val Val Tyr Phe Gly Asp Ser Met His Ser Asp Ile Phe Pro Ala Arg  
290 295 300

His Tyr Ser Asn Trp Glu Thr Val Leu Ile Leu Glu Glu Leu Arg Gly  
305 310 315 320

Asp Glu Gly Thr Arg Ser Gln Arg Pro Glu Glu Ser Glu Pro Leu Glu  
325 330 335

Lys Lys Gly Lys Tyr Glu Gly Pro Lys Ala Lys Pro Leu Asn Thr Ser  
340 345 350

Ser Lys Lys Trp Gly Ser Phe Phe Ile Asp Ser Val Leu Gly Leu Glu  
355 360 365

Asn Thr Glu Asp Ser Leu Val Tyr Thr Trp Ser Cys Lys Arg Ile Ser  
370 375 380

Thr Tyr Ser Thr Ile Ala Ile Pro Ser Ile Glu Ala Ile Ala Glu Leu  
385 390 395 400

Pro Leu Asp Tyr Lys Phe Thr Arg Phe Ser Ser Ser Asn Ser Lys Thr  
405 410 415

Ala Gly Tyr Tyr Pro Asn Pro Pro Leu Val Leu Ser Ser Asp Glu Thr  
420 425 430

Leu Ile Ser Lys  
435

<210> 1641  
<211> 81  
<212> PRT  
<213> Homo sapiens

<400> 1641  
Pro His Ser Leu Leu Phe Phe Leu Leu Gln Thr Leu Arg Gln Cys Ser  
1 5 10 15  
Asn Thr Ser Phe Thr His Pro Pro Asn Asn Ser Val His Ser Val Phe  
20 25 30  
Phe Pro Leu Ser Gly Val Ser Ser Met Leu Val Arg Leu Gly Glu His  
35 40 45  
Leu Asp Leu Phe His Arg Lys Gly Cys Phe Gln Pro Val Ser Val Met  
50 55 60  
Leu Val Leu Leu Gln Gln Ser Lys Ser Lys Gly Phe Arg Ser Leu Phe  
65 70 75 80

Asp

<210> 1642  
<211> 86  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (66)  
<223> Xaa equals any of the naturally occurring L-amino acids  
<220>

&lt;221&gt; SITE

&lt;222&gt; (73)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1642

Thr Glu Lys Lys Lys Lys Gly Gly Arg Ser Arg Gly Ser Lys Leu  
 1 5 10 15

Thr Tyr Ala Cys Met Arg Arg His Ser Ser Ser Ile Val Ser Pro Lys  
 20 25 30

Phe Asn Ser Leu Ala Val Val Leu Gln Arg Arg Asp Trp Glu Asn Pro  
 35 40 45

Gly Val Thr Gln Leu Asn Arg Leu Ala Ala His Pro Pro Phe Ala Ser  
 50 55 60

Trp Xaa Asn Ser Glu Glu Ala Arg Xaa Gly Ser Pro Phe Pro His Asn  
 65 70 75 80

Cys Ala Leu Glu Trp Ala  
 85

&lt;210&gt; 1643

&lt;211&gt; 118

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1643

His Cys Val Glu Gly Thr Ser Leu Ser Leu Pro Cys Leu Thr Val Ser  
 1 5 10 15

Gly Ser Phe Ser Pro Cys Val Ser Trp Cys Ser Gln Pro His Gln Ser  
 20 25 30

Pro Cys Arg Glu Leu Thr Ala Phe Thr Leu Lys Ala Arg Val Thr Trp  
 35 40 45

Val Val Arg His His Leu Ser Pro Cys Pro His Leu Leu Val Trp Gly  
 50 55 60

Phe Ser Gly Glu Leu Thr Ala Val Ser Thr Pro Leu Ser Pro His Pro  
 65 70 75 80

Pro Arg Pro Ala Trp Gly Thr His Phe Leu Leu Gly Gly Ala Ser Met  
 85 90 95

Val Arg Gly Pro Ala Ser Leu His Thr Ala Arg Thr Ala Leu His Arg  
 100 105 110



Pro Thr Pro Tyr Asp Thr  
115

<210> 1644  
<211> 52  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (13)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (16)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (17)  
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1644  
Arg Leu Ser Glu Ser Leu Ser Val Ser Ser Leu Gln Xaa Arg Ser Xaa  
1 5 10 15

Xaa Val Lys Pro Leu Thr Ala Val Met Ser Glu Val Ile Pro Arg Thr  
20 25 30

Trp Glu Thr Ala Val His Gly Trp Ile Leu Leu Thr Ser Ala Glu Phe  
35 40 45

Cys Gln Val Thr  
50

<210> 1645  
<211> 346  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (35)  
<223> Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (83)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1645

Pro Pro Ala Ser Thr Leu Pro Trp Asp Leu Met Lys Ser Arg Lys Asn  
1 5 10 15

Phe Lys Lys Trp Pro Leu Thr Leu Leu Pro Glu Arg Trp Leu Gln Ile  
20 25 30

Trp Gln Xaa Gly Thr Arg Ser Met Cys Ala Trp Met Ile Asp Ser Phe  
35 40 45

Gly Asn Glu Glu Gln Arg His Lys Phe Cys Pro Pro Leu Cys Thr Met  
50 55 60

Glu Lys Phe Ala Ser Tyr Cys Leu Thr Glu Pro Gly Ser Gly Ser Asp  
65 70 75 80

Ala Ala Xaa Leu Leu Thr Ser Ala Lys Lys Gln Gly Asp His Tyr Ile  
85 90 95

Leu Asn Gly Ser Lys Ala Phe Ile Ser Gly Ala Gly Glu Ser Asp Ile  
100 105 110

Tyr Val Val Met Cys Arg Thr Gly Gly Pro Gly Pro Lys Gly Ile Ser  
115 120 125

Cys Ile Val Val Glu Lys Gly Thr Pro Gly Leu Ser Phe Gly Lys Lys  
130 135 140

Glu Lys Lys Val Gly Trp Asn Ser Gln Pro Thr Arg Ala Val Ile Phe  
145 150 155 160

Glu Asp Cys Ala Val Pro Val Ala Asn Arg Ile Gly Ser Glu Gly Gln  
165 170 175

Gly Phe Leu Ile Ala Val Arg Gly Leu Asn Gly Gly Arg Ile Asn Ile  
180 185 190

Ala Ser Cys Ser Leu Gly Ala Ala His Ala Ser Val Ile Leu Thr Arg  
195 200 205

Asp His Leu Asn Val Arg Lys Gln Phe Gly Glu Pro Leu Ala Ser Asn  
210 215 220

Gln Tyr Leu Gln Phe Thr Leu Ala Asp Met Ala Thr Arg Leu Val Ala  
225 230 235 240

Ala Arg Leu Met Val Arg Asn Ala Ala Val Ala Leu Gln Glu Glu Arg  
                   245                  250                  255

Lys Asp Ala Val Ala Leu Cys Ser Met Ala Lys Leu Phe Ala Thr Asp  
                   260                  265                  270

Glu Cys Phe Ala Ile Cys Asn Gln Ala Leu Gln Met His Gly Gly Tyr  
                   275                  280                  285

Gly Tyr Leu Lys Asp Tyr Ala Val Gln Gln Tyr Val Arg Asp Ser Arg  
                   290                  295                  300

Val His Gln Ile Leu Glu Glu Leu Phe Trp Gln Gly Pro Gly Val Gln  
                   305                  310                  315                  320

Ser Arg Ser Phe Ala Leu Phe Gly Gly Pro Gln Ile Pro Leu Leu Leu  
                   325                  330                  335

Pro Phe Ser Ser Gly Asp Leu Arg Glu Gly  
                   340                  345

&lt;210&gt; 1646

&lt;211&gt; 201

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (6)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1646

Cys Asn Leu Ala Lys Xaa Val Ile Ser Ile Ser Phe Leu Lys Glu Glu  
   1                  5                  10                  15

Glu Gln Glu Asp Glu Glu Glu Ile Asp Val Val Ser Val Glu Lys Arg  
                   20                  25                  30

Gln Ala Pro Gly Lys Arg Ser Glu Ser Gly Ser Pro Ser Ala Gly Gly  
                   35                  40                  45

His Ser Lys Pro Pro His Ser Pro Leu Val Leu Lys Arg Cys His Val  
                   50                  55                  60

Ser Thr His Gln His Asn Tyr Ala Ala Pro Pro Ser Thr Arg Lys Asp  
   65                  70                  75                  80

Tyr Pro Ala Ala Lys Arg Val Lys Leu Asp Ser Val Arg Val Leu Arg  
                   85                  90                  95

Gln Ile Ser Asn Asn Arg Lys Cys Thr Ser Pro Arg Ser Ser Asp Thr  
                   100                  105                  110  
 Glu Glu Asn Val Lys Arg Arg Thr His Asn Val Leu Glu Arg Gln Arg  
                   115                  120                  125  
 Arg Asn Glu Leu Lys Arg Ser Phe Phe Ala Leu Arg Asp Gln Ile Pro  
                   130                  135                  140  
 Glu Leu Glu Asn Asn Glu Lys Ala Pro Lys Val Val Ile Leu Lys Lys  
                   145                  150                  155                  160  
 Ala Thr Ala Tyr Ile Leu Ser Val Gln Ala Glu Glu Gln Lys Leu Ile  
                   165                  170                  175  
 Ser Glu Glu Asp Leu Leu Arg Lys Arg Arg Glu Gln Leu Lys His Lys  
                   180                  185                  190  
 Leu Glu Gln Leu Arg Asn Ser Cys Ala  
                   195                  200

&lt;210&gt; 1647

&lt;211&gt; 84

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1647

Ser Ile Tyr Asp Ser Ser Lys Lys Asn His Leu Leu Tyr Ala Gly Asp  
   1                  5                  10                  15  
 Met Phe Arg Asp Leu Ser Glu Lys Leu Ala Trp Phe Glu Gly Thr Gln  
                   20                  25                  30  
 Tyr His Phe Asn Leu Leu Lys Ile Ser Val Phe Leu Leu Phe Phe Cys  
                   35                  40                  45  
 Cys His Cys Gln Ser Ala Ile Phe Phe Thr Ile Leu Leu Lys Tyr Tyr  
                   50                  55                  60  
 Cys Leu Leu Tyr Leu Phe Asn Val His Ile Leu Lys Lys Ser Ser Leu  
                   65                  70                  75                  80  
 Tyr Glu Leu Phe

&lt;210&gt; 1648

<211> 60  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (18)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (26)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (29)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (44)  
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1648

Leu Lys Ile Asn Tyr Ile Lys Ile Ser Phe Phe Val Leu Val Phe Phe  
1 5 10 15

Leu Xaa Thr Leu Cys Phe Lys Tyr Lys Xaa Lys Tyr Xaa Ile Tyr Phe  
20 25 30

Cys Val Leu Pro Ser Glu Leu Lys Phe Pro Met Xaa Leu Thr Glu Leu  
35 40 45

Gly Leu Ala Leu Gly Glu Glu Trp Thr Ala Ala Gly  
50 55 60

<210> 1649  
<211> 390  
<212> PRT  
<213> Homo sapiens

<400> 1649

Ala Arg Gly Glu Cys Cys Arg Gly Gly Leu Trp Glu Lys Met Ala Ala  
1 5 10 15

Ala Ala Gln Ser Arg Val Val Arg Val Leu Ser Met Ser Arg Ser Ala  
20 25 30

Ile Thr Ala Ile Ala Thr Ser Val Cys His Gly Pro Pro Cys Arg Gln  
 35 40 45  
 Leu His His Ala Leu Met Pro His Gly Lys Gly Gly Arg Ser Ser Val  
 50 55 60  
 Ser Gly Ile Val Ala Thr Val Phe Gly Ala Thr Gly Phe Leu Gly Arg  
 65 70 75 80  
 Tyr Val Val Asn His Leu Gly Arg Met Gly Ser Gln Val Ile Ile Pro  
 85 90 95  
 Tyr Arg Cys Asp Lys Tyr Asp Ile Met His Leu Arg Pro Met Gly Asp  
 100 105 110  
 Leu Gly Gln Leu Leu Phe Leu Glu Trp Asp Ala Arg Asp Lys Asp Ser  
 115 120 125  
 Ile Arg Arg Val Val Gln His Ser Asn Val Val Ile Asn Leu Ile Gly  
 130 135 140  
 Arg Asp Trp Glu Thr Lys Asn Phe Asp Phe Glu Asp Val Phe Val Lys  
 145 150 155 160  
 Ile Pro Gln Ala Ile Ala Gln Leu Ser Lys Glu Ala Gly Val Glu Lys  
 165 170 175  
 Phe Ile His Val Ser His Leu Asn Ala Asn Ile Lys Ser Ser Ser Arg  
 180 185 190  
 Tyr Leu Arg Asn Lys Ala Val Gly Glu Lys Val Val Arg Asp Ala Phe  
 195 200 205  
 Pro Glu Ala Ile Ile Val Lys Pro Ser Asp Ile Phe Gly Arg Glu Asp  
 210 215 220  
 Arg Phe Leu Asn Ser Phe Ala Ser Met His Arg Phe Gly Pro Ile Pro  
 225 230 235 240  
 Leu Gly Ser Leu Gly Trp Lys Thr Val Lys Gln Pro Val Tyr Val Val  
 245 250 255  
 Asp Val Ser Lys Gly Ile Val Asn Ala Val Lys Asp Pro Asp Ala Asn  
 260 265 270  
 Gly Lys Ser Phe Ala Phe Val Gly Pro Ser Arg Tyr Leu Leu Phe His  
 275 280 285  
 Leu Val Lys Tyr Ile Phe Ala Val Ala His Arg Leu Phe Leu Pro Phe  
 290 295 300

Pro Leu Pro Leu Phe Ala Tyr Arg Trp Val Ala Arg Val Phe Glu Ile  
 305 310 315 320

Ser Pro Phe Glu Pro Trp Ile Thr Arg Asp Lys Val Glu Arg Met His  
 325 330 335

Ile Thr Asp Met Lys Leu Pro His Leu Pro Gly Leu Glu Asp Leu Gly  
 340 345 350

Ile Gln Ala Thr Pro Leu Glu Leu Lys Ala Ile Glu Val Leu Arg Arg  
 355 360 365

His Arg Thr Tyr Arg Trp Leu Ser Ala Glu Ile Glu Asp Val Lys Pro  
 370 375 380

Ala Lys Thr Val Asn Ile  
 385 390

<210> 1650

<211> 99

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (25)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (58)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (81)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (92)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1650

Gly Ser Met Gly Gln Ala Gln Ser Lys Pro Thr Pro Pro Gly Thr Met  
 1 5 10 15

Leu Lys Asn Phe Lys Lys Gly Phe Xaa Gly Asp Tyr Gly Val Thr Met  
 20 25 30

Thr Pro Gly Lys Leu Arg Thr Leu Cys Glu Ile Asp Trp Pro Ala Leu  
           35                          40                          45

Glu Val Gly Trp Pro Ser Glu Gly Ser Xaa Asp Arg Ser Leu Val Ser  
           50                          55                          60

Lys Val Trp His Lys Val Thr Cys Lys Pro Gly Cys Pro Asp Gln Phe  
           65                          70                          75                          80

Xaa Tyr Ile Asp Thr Trp Leu Gln Leu Val Leu Xaa Pro Ser Tyr Pro  
                           85                          90                          95

His Gly Gly

<210> 1651

<211> 153

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (86)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1651

Ala Gly Thr Gly Gly Arg Arg Trp Gly Asn Arg Gly Ser Val Arg Leu  
   1                          5                          10                          15

Arg Val Arg Gly Ser Asp Trp Ala Glu Gln Ala Ser His Arg Arg Val  
           20                          25                          30

Thr Ala Arg Arg Pro Arg Ser Glu Leu Pro Gly Gln Pro Pro Phe Cys  
           35                          40                          45

Trp Arg Trp Glu Arg Met Trp Ala Trp Gly Trp Gly Gly Ala Lys Leu  
           50                          55                          60

Arg Gly Arg Ala Ala Asp Thr Leu Lys Leu Arg Ala Gly Arg Ala Gln  
           65                          70                          75                          80

Arg Lys Gly Arg Arg Xaa His Gly Tyr Pro Ser Val Arg Gly Ser Ser  
                           85                          90                          95

Ser Phe Phe Trp Arg Ala Gln Gly Ala Ala Gly Val Met Ser Pro Trp  
           100                          105                          110

Val Leu Ala Pro Thr Ala Lys Phe Ala Trp Pro Gly Pro Pro Ser Arg



115

120

125

Gly Leu Thr Arg His Thr Asp Gln Asn Pro Glu Gln Ala Val Leu Ser  
 130 135 140

Ile Leu Arg Leu Leu Arg Leu Pro Arg  
 145 150

&lt;210&gt; 1652

&lt;211&gt; 312

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (289)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1652

Thr Phe Ile Trp Leu Ile Leu Ile Met Asn Arg Ala Phe Ser Arg Lys  
 1 5 10 15

Lys Asp Lys Thr Trp Met His Thr Pro Glu Ala Leu Ser Lys His Phe  
 20 25 30

Ile Pro Tyr Asn Ala Lys Phe Leu Gly Ser Thr Glu Val Glu Gln Pro  
 35 40 45

Lys Gly Thr Glu Val Val Arg Asp Ala Val Arg Lys Leu Lys Phe Ala  
 50 55 60

Arg His Ile Lys Lys Ser Glu Gly Gln Lys Ile Pro Lys Val Glu Leu  
 65 70 75 80

Gln Ile Ser Ile Tyr Gly Val Lys Ile Leu Glu Pro Lys Thr Lys Glu  
 85 90 95

Val Gln His Asn Cys Gln Leu His Arg Ile Ser Phe Cys Ala Asp Asp  
 100 105 110

Lys Thr Asp Lys Arg Ile Phe Thr Phe Ile Cys Lys Asp Ser Glu Ser  
 115 120 125

Asn Lys His Leu Cys Tyr Val Phe Asp Ser Glu Lys Cys Ala Glu Glu  
 130 135 140

Ile Thr Leu Thr Ile Gly Gln Ala Phe Asp Leu Ala Tyr Arg Lys Phe  
 145 150 155 160

Leu Glu Ser Gly Gly Lys Asp Val Glu Thr Arg Lys Gln Ile Ala Gly  
                   165                  170                  175  
 Leu Gln Lys Arg Ile Gln Asp Leu Glu Thr Glu Asn Met Glu Leu Lys  
                   180                  185                  190  
 Asn Lys Val Gln Asp Leu Glu Asn Gln Leu Arg Ile Thr Gln Val Ser  
                   195                  200                  205  
 Ala Pro Pro Ala Gly Ser Met Thr Pro Lys Ser Pro Ser Thr Asp Ile  
                   210                  215                  220  
 Phe Asp Met Ile Pro Phe Ser Pro Ile Ser His Gln Ser Ser Met Pro  
 225                  230                  235                  240  
 Thr Arg Asn Gly Thr Gln Pro Pro Pro Val Pro Ser Arg Ser Thr Glu  
                   245                  250                  255  
 Ile Lys Arg Asp Leu Phe Gly Ala Glu Pro Phe Asp Pro Phe Asn Cys  
                   260                  265                  270  
 Gly Ala Ala Asp Phe Pro Pro Asp Ile Gln Ser Lys Leu Asp Glu Met  
                   275                  280                  285  
 Xaa Glu Gly Phe Lys Met Gly Leu Thr Leu Glu Gly Thr Val Phe Cys  
                   290                  295                  300  
 Leu Asp Pro Leu Asp Ser Arg Cys  
 305                  310

<210> 1653  
 <211> 50  
 <212> PRT  
 <213> Homo sapiens

<400> 1653  
 Tyr Gly Leu Gly Lys Lys Thr Lys Gln Ala Ser Cys Cys Leu Phe Tyr  
   1                  5                  10                  15  
 Ser Asn Ile Leu Leu His Met Ile Asp Ile Phe Val Val Gly Lys Trp  
                   20                  25                  30  
 Asp Ala Pro Gln Ile Leu Lys Val Leu Ala Asp Cys Ile Leu Ser Leu  
                   35                  40                  45  
 Lys Ile  
   50

<210> 1654  
<211> 117  
<212> PRT  
<213> Homo sapiens

<400> 1654

Tyr Lys Asn Asp Arg Ser Ser Tyr Glu Arg His Ala Asn Glu Thr Pro  
1 5 10 15  
Ser Ser Gly Glu Ala Leu Glu Ser Glu Leu Ser Phe Phe Leu Met Ser  
20 25 30  
Ser Asp Ala Ala Ser Phe Leu Ile Phe Leu Lys Thr Val Cys Phe Cys  
35 40 45  
Gly Met Tyr Ile Cys Thr Pro Asn Tyr Leu Ala Leu Gly Asn His Ser  
50 55 60  
Thr Thr Gln Arg Gln Leu Asn Lys Glu Lys Phe Asn Phe Lys Tyr Gln  
65 70 75 80  
Val Leu Ser Asn Ile Ser Gln Thr Ser Asp Phe Ile Lys Gly Leu Pro  
85 90 95  
Ala Asn Lys Val His Pro Lys Tyr Thr Gly Glu Lys Ala Arg Leu Leu  
100 105 110  
Gln Gly Pro Arg Val  
115

<210> 1655  
<211> 373  
<212> PRT  
<213> Homo sapiens  
  
<220>  
<221> SITE  
<222> (144)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (290)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (325)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (328)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1655

Val Met Ser Thr Ala Ala Leu Ile Thr Leu Val Arg Ser Gly Gly Asn  
1 5 10 15

Gln Val Arg Arg Arg Val Leu Leu Ser Ser Arg Leu Leu Gln Asp Asp  
20 25 30

Arg Arg Val Thr Pro Thr Cys His Ser Ser Thr Ser Glu Pro Arg Cys  
35 40 45

Ser Arg Phe Asp Pro Asp Gly Ser Gly Ser Pro Ala Thr Trp Asp Asn  
50 55 60

Phe Gly Ile Trp Asp Asn Arg Ile Asp Glu Pro Ile Leu Leu Pro Pro  
65 70 75 80

Ser Ile Lys Tyr Gly Lys Pro Ile Pro Lys Ile Ser Leu Glu Asn Val  
85 90 95

Gly Cys Ala Ser Gln Ile Gly Lys Arg Lys Glu Asn Glu Asp Arg Phe  
100 105 110

Asp Phe Ala Gln Leu Thr Asp Glu Val Leu Tyr Phe Ala Val Tyr Asp  
115 120 125

Gly His Gly Gly Pro Ala Ala Ala Asp Phe Cys His Thr His Met Xaa  
130 135 140

Lys Cys Ile Met Asp Leu Leu Pro Lys Glu Lys Asn Leu Glu Thr Leu  
145 150 155 160

Leu Thr Leu Ala Phe Leu Glu Ile Asp Lys Ala Phe Ser Ser His Ala  
165 170 175

Arg Leu Ser Ala Asp Ala Thr Leu Leu Thr Ser Gly Thr Thr Ala Thr  
180 185 190

Val Ala Leu Leu Arg Asp Gly Ile Glu Leu Val Val Ala Ser Val Gly  
195 200 205

Asp Ser Arg Ala Ile Leu Cys Arg Lys Gly Lys Pro Met Lys Leu Thr  
210 215 220

Ile Asp His Thr Pro Glu Arg Lys Asp Glu Lys Glu Arg Ile Lys Lys

225                      230                      235                      240  
 Cys Gly Gly Phe Val Ala Trp Asn Ser Leu Gly Gln Pro His Val Asn  
                                  245                      250                      255  
 Gly Arg Leu Ala Met Thr Arg Ser Ile Gly Asp Leu Asp Leu Lys Thr  
                                  260                      265                      270  
 Ser Gly Val Ile Ala Glu Pro Glu Thr Lys Arg Ile Lys Leu His His  
                                  275                      280                      285  
 Ala Xaa Asp Ser Phe Leu Val Leu Thr Thr Asp Gly Ile Asn Phe Met  
                                  290                      295                      300  
 Val Asn Ser Gln Glu Ile Cys Asp Phe Val Asn Gln Cys His Asp Pro  
 305                                   310                      315                      320  
 Asn Glu Ala Ala Xaa Ala Val Xaa Glu Gln Ala Ile Gln Tyr Gly Thr  
                                  325                      330                      335  
 Glu Asp Asn Ser Thr Ala Val Val Val Pro Phe Gly Ala Trp Gly Lys  
                                  340                      345                      350  
 Tyr Lys Asn Ser Glu Ile Asn Phe Ser Phe Ser Arg Ser Phe Ala Ser  
                                  355                      360                      365  
 Ser Gly Arg Trp Ala  
                                  370  
  
 <210> 1656  
 <211> 82  
 <212> PRT  
 <213> Homo sapiens  
  
 <400> 1656  
 Arg Pro Thr Arg Pro Pro Gly Arg Thr Ala Ser Arg Leu Ala Glu Cys  
   1                                    5                                    10                                    15  
 Gly Leu Ala Gly Ser Ala Val Ser Gln Arg Glu Gln Thr Ser Pro Ser  
                                  20                                    25                                    30  
 Pro Ser Gly Gln Leu Arg Glu Lys Asn Phe Arg Glu Phe Pro Ala Gly  
                                  35                                    40                                    45  
 Lys Ala Val Ala Ala Leu Thr Ala Cys Phe Gly Asp Pro Arg Arg Arg  
                                  50                                    55                                    60  
 Arg Arg His Ser Tyr Leu Pro Thr Lys Lys Ala Pro Pro Pro Ser Ser  
                                  65                                    70                                    75                                    80

Val Ser

<210> 1657

<211> 273

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (30)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1657

Val Ala Arg Ser Ser Ser Glu Leu Pro Arg Arg Leu Val Cys Ser Lys  
1 5 10 15

Leu Arg Ala Asp Pro Gly Arg Leu Thr Pro Asp Ala Cys Xaa Arg Pro  
20 25 30

Gly Met Ser Arg Tyr Leu Leu Pro Leu Ser Ala Leu Gly Thr Val Ala  
35 40 45

Gly Ala Ala Val Leu Leu Lys Asp Tyr Val Thr Gly Gly Ala Cys Pro  
50 55 60

Ser Lys Ala Thr Ile Pro Gly Lys Thr Val Ile Val Thr Gly Ala Asn  
65 70 75 80

Thr Gly Ile Gly Lys Gln Thr Ala Leu Glu Leu Ala Arg Arg Gly Gly  
85 90 95

Asn Ile Ile Leu Ala Cys Arg Asp Met Glu Lys Cys Glu Ala Ala Ala  
100 105 110

Lys Asp Ile Arg Gly Glu Thr Leu Asn His His Val Asn Ala Arg His  
115 120 125

Leu Asp Leu Ala Ser Leu Lys Ser Ile Arg Glu Phe Ala Ala Lys Ile  
130 135 140

Ile Glu Glu Glu Glu Arg Val Asp Ile Leu Ile Asn Asn Ala Gly Val  
145 150 155 160

Met Arg Cys Pro His Trp Thr Thr Glu Asp Gly Phe Glu Met Gln Phe  
165 170 175

Gly Val Asn His Leu Gly His Phe Leu Leu Thr Asn Leu Leu Leu Asp

180                      185                      190  
 Lys Leu Lys Ala Ser Ala Pro Ser Arg Ile Ile Asn Leu Ser Ser Leu  
     195                      200                      205  
 Ala His Val Ala Gly His Ile Asp Phe Asp Asp Leu Asn Trp Gln Thr  
     210                      215                      220  
 Arg Lys Tyr Asn Thr Lys Ala Ala Tyr Cys Gln Ser Lys Leu Ala Ile  
 225                      230                      235                      240  
 Val Leu Phe Thr Lys Glu Leu Ser Arg Arg Leu Gln Gly Thr Gly Ala  
                     245                      250                      255  
 Leu Gly Ser Ala Ser Leu Leu Leu Tyr Ser Glu Pro Arg Ala Ala Phe  
                     260                      265                      270

Pro

<210> 1658  
 <211> 240  
 <212> PRT  
 <213> Homo sapiens

<400> 1658  
 Tyr Leu Cys Ile Leu Gln Ala Ser Lys Leu Glu Asp Leu Arg Val Lys  
     1                      5                      10                      15  
 Leu Lys Lys Glu Gly Tyr Ser Asn Ile Ser Tyr Ile Val Val Asn His  
                     20                      25                      30  
 Gln Gly Ile Ser Ser Arg Leu Lys Tyr Thr His Leu Lys Asn Lys Val  
                     35                      40                      45  
 Ser Glu His Ile Pro Val Tyr Gln Gln Glu Glu Asn Gln Thr Asp Val  
                     50                      55                      60  
 Trp Thr Leu Leu Asn Gly Ser Lys Asp Asp Phe Leu Ile Tyr Asp Arg  
     65                      70                      75                      80  
 Cys Gly Arg Leu Val Tyr His Leu Gly Leu Pro Phe Ser Phe Leu Thr  
                     85                      90                      95  
 Phe Pro Tyr Val Glu Glu Ala Ile Lys Ile Ala Tyr Cys Glu Lys Lys  
                     100                      105                      110  
 Cys Gly Asn Cys Ser Leu Thr Thr Leu Lys Asp Glu Asp Phe Cys Lys  
                     115                      120                      125

Arg Val Ser Leu Ala Thr Val Asp Lys Thr Val Glu Thr Pro Ser Pro  
 130 135 140

His Tyr His His Glu His His His Asn His Gly His Gln His Leu Gly  
 145 150 155 160

Ser Ser Glu Leu Ser Glu Asn Gln Gln Pro Gly Ala Pro Asn Ala Pro  
 165 170 175

Thr His Pro Ala Pro Pro Gly Leu His His His His Lys His Lys Gly  
 180 185 190

Gln His Arg Gln Gly His Pro Glu Asn Arg Asp Met Pro Ala Ser Glu  
 195 200 205

Asp Leu Gln Asp Leu Gln Lys Lys Leu Cys Arg Lys Arg Cys Ile Asn  
 210 215 220

Gln Leu Leu Cys Lys Leu Pro Thr Asp Ser Glu Leu Ala Pro Arg Ser  
 225 230 235 240

<210> 1659

<211> 221

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (1)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1659

Xaa Thr Arg Gly Tyr Gly Cys Glu Lys Thr Thr Glu Gly Gly Ser Gln  
 1 5 10 15

Gly Pro Leu Pro Ala Leu Ala Ala Gly Ser Thr Phe Pro Val Leu Ala  
 20 25 30

Cys Ser Ser Ala Met Ala Pro Lys Gly Ser Ser Lys Gln Gln Ser Glu  
 35 40 45

Glu Asp Leu Leu Leu Gln Asp Phe Ser Arg Asn Leu Ser Ala Lys Ser  
 50 55 60

Ser Ala Leu Phe Phe Gly Asn Ala Phe Ile Val Ser Ala Ile Pro Ile



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<220>
<221> SITE
<222> (167)
<223> Xaa equals any of the naturally occurring L-amino acids
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&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (321)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (383)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (403)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1660

Glu Leu Gly Ala Gly Gly Asp Gly His Arg Gly Gly Asp Gly Ala Val  
 1 5 10 15

Arg Ser Glu Thr Ala Pro Asp Ser Tyr Lys Val Gln Asp Lys Lys Asn  
 20 25 30

Ala Ser Ser Arg Pro Ala Ser Ala Ile Ser Gly Gln Asn Asn Asn His  
 35 40 45

Ser Gly Asn Lys Pro Asp Pro Pro Pro Val Leu Arg Val Asp Asp Arg  
 50 55 60

Gln Arg Leu Ala Arg Glu Arg Arg Glu Glu Arg Glu Lys Gln Leu Ala  
 65 70 75 80

Ala Arg Glu Ile Val Trp Leu Glu Arg Glu Glu Arg Ala Arg Gln His  
 85 90 95

Tyr Glu Lys His Leu Glu Glu Arg Lys Lys Arg Leu Glu Glu Gln Arg  
 100 105 110

Gln Lys Glu Glu Arg Arg Arg Ala Ala Val Glu Glu Lys Arg Arg Gln  
 115 120 125

Arg Leu Glu Glu Asp Lys Glu Arg His Glu Ala Xaa Val Arg Arg Thr  
 130 135 140

Met Glu Arg Ser Gln Lys Pro Lys Gln Lys His Asn Arg Trp Ser Trp  
 145 150 155 160

Gly Gly Ser Xaa His Gly Xaa Pro Ser Ile His Ser Ala Ala Arg Arg  
 165 170 175

Leu Gln Leu Ser Pro Trp Glu Ser Ser Val Val Asn Arg Leu Leu Thr  
 180 185 190

Pro Thr His Ser Phe Leu Ala Arg Ser Lys Ser Thr Ala Ala Leu Ser  
195 200 205

Gly Glu Ala Ala Ser Cys Ser Pro Ile Ile Met Pro Tyr Lys Ala Ala  
210 215 220

His Ser Arg Asn Ser Met Asp Arg Pro Lys Leu Phe Val Thr Pro Pro  
225 230 235 240

Glu Gly Ser Ser Arg Arg Arg Ile Ile His Gly Thr Ala Ser Tyr Lys  
245 250 255

Lys Glu Arg Glu Arg Glu Asn Val Leu Phe Leu Thr Ser Gly Thr Arg  
260 265 270

Arg Ala Val Ser Pro Ser Asn Pro Lys Ala Arg Gln Pro Ala Arg Ser  
275 280 285

Arg Leu Trp Leu Pro Ser Lys Ser Leu Pro His Leu Pro Gly Thr Pro  
290 295 300

Arg Pro Thr Ser Ser Leu Pro Pro Gly Ser Val Lys Ala Ala Pro Ala  
305 310 315 320

Xaa Val Arg Pro Pro Ser Pro Gly Asn Ile Arg Pro Val Lys Arg Glu  
325 330 335

Val Lys Val Glu Pro Glu Lys Lys Asp Pro Glu Lys Glu Pro Gln Lys  
340 345 350

Val Ala Asn Glu Pro Ser Leu Lys Gly Arg Ala Pro Leu Val Lys Val  
355 360 365

Glu Glu Ala Thr Val Glu Glu Arg Thr Pro Ala Glu Pro Glu Xaa Gly  
370 375 380

Leu Leu Leu Gln Pro Trp Pro Gln Leu Gln Pro Arg Pro Gln Leu Gln  
385 390 395 400

Pro Arg Xaa Gln Leu Gln Pro Arg Ser Pro Pro Gln Pro Trp Ser Gln  
405 410 415

Pro Arg His Pro Leu  
420

&lt;210&gt; 1661

&lt;211&gt; 468

&lt;212&gt; PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (2)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1661

Arg	Xaa	Thr	Thr	Ser	Gly	Thr	Leu	Asp	Phe	Asp	Glu	Val	Val	Asn	Asp
1				5					10					15	

Ala	Asp	Ile	Ile	Leu	Val	Glu	Phe	Tyr	Ala	Pro	Trp	Cys	Gly	His	Cys
		20						25					30		

Lys	Lys	Leu	Ala	Pro	Glu	Tyr	Glu	Lys	Ala	Ala	Lys	Glu	Leu	Ser	Lys
		35					40					45			

Arg	Ser	Pro	Pro	Ile	Pro	Leu	Ala	Lys	Val	Asp	Ala	Thr	Ala	Glu	Thr
	50					55					60				

Asp	Leu	Ala	Lys	Arg	Phe	Asp	Val	Ser	Gly	Tyr	Pro	Thr	Leu	Lys	Ile
65					70					75					80

Phe	Arg	Lys	Gly	Arg	Pro	Tyr	Asp	Tyr	Asn	Gly	Pro	Arg	Glu	Lys	Tyr
				85					90					95	

Gly	Ile	Val	Asp	Tyr	Met	Ile	Glu	Gln	Ser	Gly	Pro	Pro	Ser	Lys	Glu
		100						105					110		

Ile	Leu	Thr	Leu	Lys	Gln	Val	Gln	Glu	Phe	Leu	Lys	Asp	Gly	Asp	Asp
	115						120					125			

Val	Ile	Ile	Ile	Gly	Val	Phe	Lys	Gly	Glu	Ser	Asp	Pro	Ala	Tyr	Gln
	130					135					140				

Gln	Tyr	Gln	Asp	Ala	Ala	Asn	Asn	Leu	Arg	Glu	Asp	Tyr	Lys	Phe	His
145					150					155					160

His	Thr	Phe	Ser	Thr	Glu	Ile	Ala	Lys	Phe	Leu	Lys	Val	Ser	Gln	Gly
				165					170					175	

Gln	Leu	Val	Val	Met	Gln	Pro	Glu	Lys	Phe	Gln	Ser	Lys	Tyr	Glu	Pro
		180						185					190		

Arg	Ser	His	Met	Met	Asp	Val	Gln	Gly	Ser	Thr	Gln	Asp	Ser	Ala	Ile
	195						200					205			

Lys	Asp	Phe	Val	Leu	Lys	Tyr	Ala	Leu	Pro	Leu	Val	Gly	His	Arg	Lys
	210					215					220				

Val	Ser	Asn	Asp	Ala	Lys	Arg	Tyr	Thr	Arg	Arg	Pro	Leu	Val	Val	Val
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

225                      230                      235                      240  
Tyr Tyr Ser Val Asp Phe Ser Phe Asp Tyr Arg Ala Ala Thr Gln Phe  
                         245                      250                      255  
Trp Arg Ser Lys Val Leu Glu Val Ala Lys Asp Phe Pro Glu Tyr Thr  
                         260                      265                      270  
Phe Ala Ile Ala Asp Glu Glu Asp Tyr Ala Gly Glu Val Lys Asp Leu  
                         275                      280                      285  
Gly Leu Ser Glu Ser Gly Glu Asp Val Asn Ala Ala Ile Leu Asp Glu  
                         290                      295                      300  
Ser Gly Lys Lys Phe Ala Met Glu Pro Glu Glu Phe Asp Ser Asp Thr  
305                      310                      315                      320  
Leu Arg Glu Phe Val Thr Ala Phe Lys Lys Gly Lys Leu Lys Pro Val  
                         325                      330                      335  
Ile Lys Ser Gln Pro Val Pro Lys Asn Asn Lys Gly Pro Val Lys Val  
                         340                      345                      350  
Val Val Gly Lys Thr Phe Asp Ser Ile Val Met Asp Pro Lys Lys Asp  
                         355                      360                      365  
Val Leu Ile Glu Phe Tyr Ala Pro Trp Cys Gly His Cys Lys Gln Leu  
                         370                      375                      380  
Glu Pro Val Tyr Asn Ser Leu Ala Lys Lys Tyr Lys Gly Gln Lys Gly  
385                      390                      395                      400  
Leu Val Ile Ala Lys Met Asp Ala Thr Ala Asn Asp Val Pro Ser Asp  
                         405                      410                      415  
Arg Tyr Lys Val Glu Gly Phe Pro Thr Ile Tyr Phe Ala Pro Ser Gly  
                         420                      425                      430  
Asp Lys Lys Asn Pro Val Lys Phe Glu Gly Gly Asp Arg Asp Leu Glu  
                         435                      440                      445  
His Leu Ser Lys Phe Ile Glu Glu His Ala Thr Lys Leu Ser Arg Thr  
                         450                      455                      460  
Lys Glu Glu Leu  
465

&lt;210&gt; 1662

&lt;211&gt; 355

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (6)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (262)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1662

Ala	Ala	Gly	Ile	Arg	Xaa	Arg	Arg	Gly	Gly	Cys	Lys	Met	Pro	Leu	Pro
1				5				10						15	

Val	Gln	Val	Phe	Asn	Leu	Gln	Gly	Ala	Val	Glu	Pro	Met	Gln	Ile	Asp
	20						25						30		

Val	Asp	Pro	Gln	Glu	Asp	Pro	Gln	Asn	Ala	Pro	Asp	Val	Asn	Tyr	Val
	35					40						45			

Val	Glu	Asn	Pro	Ser	Leu	Asp	Leu	Glu	Gln	Tyr	Ala	Ala	Ser	Tyr	Ser
	50					55					60				

Gly	Leu	Met	Arg	Ile	Glu	Arg	Leu	Gln	Phe	Ile	Ala	Asp	His	Cys	Pro
65				70						75					80

Thr	Leu	Arg	Val	Glu	Ala	Leu	Lys	Met	Ala	Leu	Ser	Phe	Val	Gln	Arg
			85						90					95	

Thr	Phe	Asn	Val	Asp	Met	Tyr	Glu	Glu	Ile	His	Arg	Lys	Leu	Ser	Glu
		100						105					110		

Ala	Thr	Arg	Glu	Leu	Gln	Asn	Ala	Pro	Asp	Ala	Ile	Pro	Glu	Ser	Gly
	115						120					125			

Val	Glu	Pro	Pro	Ala	Leu	Asp	Thr	Ala	Trp	Val	Glu	Ala	Thr	Arg	Lys
	130					135					140				

Lys	Ala	Leu	Leu	Lys	Leu	Glu	Lys	Leu	Asp	Thr	Asp	Leu	Lys	Asn	Tyr
145					150					155					160

Lys	Gly	Asn	Ser	Ile	Lys	Glu	Ser	Ile	Arg	Arg	Gly	His	Asp	Asp	Leu
			165						170					175	

Gly	Asp	His	Tyr	Leu	Asp	Cys	Gly	Asp	Leu	Ser	Asn	Ala	Leu	Lys	Cys
		180						185						190	

Tyr	Ser	Arg	Ala	Arg	Asp	Tyr	Cys	Thr	Ser	Ala	Lys	His	Val	Ile	Asn
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

195                                      200                                      205  
 Met Cys Leu Asn Val Ile Lys Val Ser Val Tyr Leu Gln Asn Trp Ser  
     210                                      215                                      220  
 His Val Leu Ser Tyr Val Ser Lys Ala Glu Ser Thr Pro Glu Ile Ala  
     225                                      230                                      235                                      240  
 Glu Gln Arg Gly Glu Arg Asp Ser Gln Thr Gln Ala Ile Leu Thr Lys  
                                     245                                      250                                      255  
 Leu Lys Cys Ala Ala Xaa Trp Gln Ser Trp Pro Pro Gly Ser Thr Ser  
                                     260                                      265                                      270  
 Arg Leu Pro Ser Ala Ser Cys Trp Leu Pro Leu Ile Thr Val Thr Ser  
     275                                      280                                      285  
 Leu Ser Cys Cys Pro Pro Ala Thr Trp Pro Ser Thr Val Ala Cys Ala  
     290                                      295                                      300  
 Pro Trp Leu Pro Leu Thr Gly Arg Ser Cys Ser Ala Met Ser Ser Pro  
     305                                      310                                      315                                      320  
 Ala Ala Pro Ser Ser Cys Ser Trp Ser Trp Ser His Arg Ser Glu Thr  
                                     325                                      330                                      335  
 Ser Ser Ser Asn Ser Thr Ser Pro Ser Thr Pro His Val Ser Arg Cys  
                                     340                                      345                                      350  
 Trp Thr Arg  
     355

&lt;210&gt; 1663

&lt;211&gt; 74

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1663

Leu Ser His Leu Ser Leu Leu Asn Ser Trp Asp Tyr Arg Cys Met Leu  
     1                                      5                                      10                                      15  
 Pro Cys Leu Ala Thr Phe Cys Val Phe Ser Arg Asp Arg Val Ser Pro  
                                     20                                      25                                      30  
 Cys Trp Ser Gly Trp Ser Arg Thr Pro Asp Leu Lys Trp Ser Val Trp  
                                     35                                      40                                      45  
 Leu Gly Leu Pro Arg Cys Trp Asp Tyr Arg Cys Glu Pro Leu His Leu  
     50                                      55                                      60

Ala Tyr Ile Gly Phe Phe Leu Lys Pro Ile  
65 70

<210> 1664  
<211> 485  
<212> PRT  
<213> Homo sapiens

<400> 1664  
Pro Gly Ser Ile Leu Arg Glu Thr Gly Leu Gly Cys Asp Ala Ala Ala  
1 5 10 15  
Gly Val Arg Met Ser Tyr Pro Gly Tyr Pro Pro Thr Gly Tyr Pro Pro  
20 25 30  
Phe Pro Gly Tyr Pro Pro Ala Gly Gln Glu Ser Ser Phe Pro Pro Ser  
35 40 45  
Gly Gln Tyr Pro Tyr Pro Ser Gly Phe Pro Pro Met Gly Gly Gly Ala  
50 55 60  
Tyr Pro Gln Val Pro Ser Ser Gly Tyr Pro Gly Ala Gly Gly Tyr Pro  
65 70 75 80  
Ala Pro Gly Gly Tyr Pro Ala Pro Gly Gly Tyr Pro Gly Ala Pro Gln  
85 90 95  
Pro Gly Gly Ala Pro Ser Tyr Pro Gly Val Pro Pro Gly Gln Gly Phe  
100 105 110  
Gly Val Pro Pro Gly Gly Ala Gly Phe Ser Gly Tyr Pro Gln Pro Pro  
115 120 125  
Ser Gln Ser Tyr Gly Gly Gly Pro Ala Gln Val Pro Leu Pro Gly Gly  
130 135 140  
Phe Pro Gly Gly Gln Met Pro Ser Gln Tyr Pro Gly Gly Gln Pro Thr  
145 150 155 160  
Tyr Pro Ser Gln Pro Ala Thr Val Thr Gln Val Thr Gln Gly Thr Ile  
165 170 175  
Arg Pro Ala Ala Asn Phe Asp Ala Ile Arg Asp Ala Glu Ile Leu Arg  
180 185 190  
Lys Ala Met Lys Gly Phe Gly Thr Asp Glu Gln Ala Ile Val Asp Val  
195 200 205



Val Ala Asn Arg Ser Asn Asp Gln Arg Gln Lys Ile Lys Ala Ala Phe  
 210 215 220  
 Lys Thr Ser Tyr Gly Lys Asp Leu Ile Lys Asp Leu Lys Ser Glu Leu  
 225 230 235 240  
 Ser Gly Asn Met Glu Glu Leu Ile Leu Ala Leu Phe Met Pro Pro Thr  
 245 250 255  
 Tyr Tyr Asp Ala Trp Ser Leu Arg Lys Ala Met Gln Gly Ala Gly Thr  
 260 265 270  
 Gln Glu Arg Val Leu Ile Glu Ile Leu Cys Thr Arg Thr Asn Gln Glu  
 275 280 285  
 Ile Arg Glu Ile Val Arg Cys Tyr Gln Ser Glu Phe Gly Arg Asp Leu  
 290 295 300  
 Glu Lys Asp Ile Arg Ser Asp Thr Ser Gly His Phe Glu Arg Leu Leu  
 305 310 315 320  
 Val Ser Met Cys Gln Gly Asn Arg Asp Glu Asn Gln Ser Ile Asn His  
 325 330 335  
 Gln Met Ala Gln Glu Asp Ala Gln Arg Leu Tyr Gln Ala Gly Glu Gly  
 340 345 350  
 Arg Leu Gly Thr Asp Glu Ser Cys Phe Asn Met Ile Leu Ala Thr Arg  
 355 360 365  
 Ser Phe Pro Gln Leu Arg Ala Thr Met Glu Ala Tyr Ser Arg Met Ala  
 370 375 380  
 Asn Arg Asp Leu Leu Ser Ser Val Ser Arg Glu Phe Ser Gly Tyr Val  
 385 390 395 400  
 Glu Ser Gly Leu Lys Thr Ile Leu Gln Cys Ala Leu Asn Arg Pro Ala  
 405 410 415  
 Phe Phe Ala Glu Arg Leu Tyr Tyr Ala Met Lys Gly Ala Gly Thr Asp  
 420 425 430  
 Asp Ser Thr Leu Val Arg Ile Val Val Thr Arg Ser Glu Ile Asp Leu  
 435 440 445  
 Val Gln Ile Lys Gln Met Phe Ala Gln Met Tyr Gln Lys Thr Leu Gly  
 450 455 460  
 Thr Met Ile Ala Gly Asp Thr Ser Gly Asp Tyr Arg Arg Leu Leu Leu  
 465 470 475 480

Ala Ile Val Gly Gln  
485

<210> 1665

<211> 235

<212> PRT

<213> Homo sapiens

<400> 1665

Arg Asn Val Ile Glu Ala Cys Leu Gln Thr Gly Thr Arg Phe Leu Val  
1 5 10 15

Tyr Thr Ser Ser Met Glu Val Val Gly Pro Asn Thr Lys Gly His Pro  
20 25 30

Phe Tyr Arg Gly Asn Glu Asp Thr Pro Tyr Glu Ala Val His Arg His  
35 40 45

Pro Tyr Pro Cys Ser Lys Ala Leu Ala Glu Trp Leu Val Leu Glu Ala  
50 55 60

Asn Gly Arg Lys Val Arg Gly Gly Leu Pro Leu Val Thr Cys Ala Leu  
65 70 75 80

Arg Pro Thr Gly Ile Tyr Gly Glu Gly His Gln Ile Met Arg Asp Phe  
85 90 95

Tyr Arg Gln Gly Leu Arg Leu Gly Gly Trp Leu Phe Arg Ala Ile Pro  
100 105 110

Ala Ser Val Glu His Gly Arg Val Tyr Val Gly Asn Val Ala Trp Met  
115 120 125

His Val Leu Ala Ala Arg Glu Leu Glu Gln Arg Ala Ala Leu Met Gly  
130 135 140

Gly Gln Val Tyr Phe Cys Tyr Asp Gly Ser Pro Tyr Arg Ser Tyr Glu  
145 150 155 160

Asp Phe Asn Met Glu Phe Leu Gly Pro Leu Arg Thr Ala Ala Gly Gly  
165 170 175

Arg Pro Pro Ile Ala Ala Leu Leu Ala Ala Gly Val Pro Gly Cys Pro  
180 185 190

Gln Cys Pro Ala Ala Val Ala Ala Ala Ala Thr Gly Ala Leu Arg Thr  
195 200 205

Pro Ala Glu Pro Leu His Ala Gly Arg Gly Gln His His Leu His Arg

210

215

220

Gln His Arg Gln Gly Ser Ala Pro Phe Arg Leu  
 225 230 235

&lt;210&gt; 1666

&lt;211&gt; 292

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (85)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1666

Ala Ala Leu Glu Gly Pro Glu Glu Glu Leu Glu Gly Ser Ser Glu Pro  
 1 5 10 15

Glu Glu Trp Cys Pro Pro Met Pro Glu Arg Ser His Leu Thr Glu Pro  
 20 25 30

Ser Ser Ser Gly Gly Cys Leu Val Thr Pro Ser Arg Arg Glu Thr Pro  
 35 40 45

Ser Pro Thr Pro Ser Tyr Gly Gln Gln Ser Thr Ala Thr Leu Thr Pro  
 50 55 60

Ser Pro Pro Asp Pro Pro Gln Pro Pro Thr Asp Met Pro His Leu His  
 65 70 75 80

Gln Met Pro Arg Xaa Val Pro Leu Gly Pro Ser Ser Pro Leu Ser Val  
 85 90 95

Ser Gln Pro Met Leu Gly Ile Arg Glu Ala Arg Pro Ala Gly Leu Gly  
 100 105 110

Ala Gly Pro Ala Ala Ser Pro His Leu Ser Pro Ser Pro Ala Pro Ser  
 115 120 125

Thr Ala Ser Ser Ala Pro Gly Arg Thr Trp Gln Gly Asn Gly Glu Met  
 130 135 140

Thr Pro Pro Leu Gln Gly Pro Arg Ala Arg Phe Arg Lys Lys Pro Lys  
 145 150 155 160

Ala Leu Pro Tyr Arg Arg Glu Asn Ser Pro Gly Asp Leu Pro Pro Pro  
 165 170 175

Pro Leu Pro Pro Pro Glu Glu Glu Ala Ser Trp Ala Leu Glu Leu Arg  
180 185 190

Ala Ala Gly Ser Met Ser Ser Leu Glu Arg Glu Arg Ser Gly Glu Arg  
195 200 205

Lys Ala Val Gln Ala Val Pro Leu Ala Ala Gln Arg Val Leu His Pro  
210 215 220

Asp Glu Glu Ala Trp Leu Pro Tyr Ser Arg Pro Ser Phe Leu Ser Arg  
225 230 235 240

Gly Gln Gly Thr Ser Thr Cys Ser Thr Ala Gly Ser Asn Ser Ser Arg  
245 250 255

Gly Ser Ser Ser Ser Arg Gly Ser Arg Gly Pro Gly Arg Ser Arg Ser  
260 265 270

Arg Ser Gln Ser Arg Ser Gln Ser Gln Arg Pro Gly Gln Lys Arg Arg  
275 280 285

Glu Glu Pro Arg  
290

<210> 1667

<211> 521

<212> PRT

<213> Homo sapiens

<400> 1667

Lys Trp Lys Ser Gly Lys Asp Val Asp Ile Ser Leu Leu Val Ser Phe  
1 5 10 15

Asn Lys Met Lys Lys Leu Thr Thr Asp Gly Lys Leu Ile Ala Arg Ala  
20 25 30

Leu Arg Ser Ser Ala Val Val Glu Leu Asp Leu Glu Gly Thr Arg Ile  
35 40 45

Arg Arg Lys Lys Pro Leu Gly Glu Arg Pro Lys Asp Glu Asp Glu Arg  
50 55 60

Thr Val Tyr Val Glu Leu Leu Pro Lys Asn Val Asn His Ser Trp Ile  
65 70 75 80

Glu Arg Val Phe Gly Lys Cys Gly Asn Val Val Tyr Ile Ser Ile Pro  
85 90 95

His Tyr Lys Ser Thr Gly Asp Pro Lys Gly Phe Ala Phe Val Glu Phe

100	105	110
Glu Thr Lys Glu Gln Ala Ala Lys Ala Ile Glu Phe Leu Asn Asn Pro		
115	120	125
Pro Glu Glu Ala Pro Arg Lys Pro Gly Ile Phe Pro Lys Thr Val Lys		
130	135	140
Asn Lys Pro Ile Pro Ala Leu Arg Val Val Glu Glu Lys Lys Lys Lys		
145	150	155
Lys Lys Lys Lys Gly Arg Met Lys Lys Glu Asp Asn Ile Gln Ala Lys		
165	170	175
Glu Glu Asn Met Asp Thr Ser Asn Thr Ser Ile Ser Lys Met Lys Arg		
180	185	190
Ser Arg Pro Thr Ser Glu Gly Ser Asp Ile Glu Ser Thr Glu Pro Gln		
195	200	205
Lys Gln Cys Ser Lys Lys Lys Lys Lys Arg Asp Arg Val Glu Ala Ser		
210	215	220
Ser Leu Pro Glu Val Arg Thr Gly Lys Arg Lys Arg Ser Ser Ser Glu		
225	230	235
Asp Ala Glu Ser Leu Ala Pro Arg Ser Lys Val Lys Lys Ile Ile Gln		
245	250	255
Lys Asp Ile Ile Lys Glu Ala Ser Glu Ala Ser Lys Glu Asn Arg Asp		
260	265	270
Ile Glu Ile Ser Thr Glu Glu Glu Lys Asp Thr Gly Asp Leu Lys Asp		
275	280	285
Ser Ser Leu Leu Lys Thr Lys Arg Lys His Lys Lys Lys His Lys Glu		
290	295	300
Arg His Lys Met Gly Glu Glu Val Ile Pro Leu Arg Val Leu Ser Lys		
305	310	315
Ser Glu Trp Met Asp Leu Lys Lys Glu Tyr Leu Ala Leu Gln Lys Ala		
325	330	335
Ser Met Ala Ser Leu Lys Lys Thr Ile Ser Gln Ile Lys Ser Glu Ser		
340	345	350
Glu Met Glu Thr Asp Ser Gly Val Pro Gln Asn Thr Gly Met Lys Asn		
355	360	365
Glu Lys Thr Ala Asn Arg Glu Glu Cys Arg Thr Gln Glu Lys Val Asn		

370                                      375                                      380  
 Ala Thr Gly Pro Gln Phe Val Ser Gly Val Ile Val Lys Ile Ile Ser  
 385                                      390                                      395                                      400  
 Thr Glu Pro Leu Pro Gly Arg Lys Gln Val Arg Asp Thr Leu Ala Ala  
                                     405                                      410                                      415  
 Ile Ser Glu Val Leu Tyr Val Asp Leu Leu Glu Gly Asp Thr Glu Cys  
                                     420                                      425                                      430  
 His Ala Arg Phe Lys Thr Pro Glu Asp Ala Gln Ala Val Ile Asn Ala  
                                     435                                      440                                      445  
 Tyr Thr Glu Ile Asn Lys Lys His Cys Trp Lys Leu Glu Ile Leu Ser  
                                     450                                      455                                      460  
 Gly Asp His Glu Gln Arg Tyr Trp Gln Lys Ile Leu Val Asp Arg Gln  
 465                                      470                                      475                                      480  
 Ala Lys Leu Asn Gln Pro Arg Glu Lys Lys Arg Gly Thr Glu Lys Leu  
                                     485                                      490                                      495  
 Ile Thr Lys Ala Glu Lys Ile Arg Leu Ala Lys Thr Gln Gln Ala Ser  
                                     500                                      505                                      510  
 Lys His Ile Arg Phe Ser Glu Tyr Asp  
                                     515                                      520

&lt;210&gt; 1668

&lt;211&gt; 306

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1668

Phe Pro Glu Leu Ser Gly Arg Arg Ala Lys Ala Lys Gly Val Trp Arg  
 1                                      5                                      10                                      15  
 Ala Ala Pro Gly Ala Asn Met Pro Arg Tyr Ala Gln Leu Val Met Gly  
                                     20                                      25                                      30  
 Pro Ala Gly Ser Gly Lys Ser Thr Tyr Cys Ala Thr Met Val Gln His  
                                     35                                      40                                      45  
 Cys Glu Ala Leu Asn Arg Ser Val Gln Val Val Asn Leu Asp Pro Ala  
                                     50                                      55                                      60  
 Ala Glu His Phe Asn Tyr Ser Val Met Ala Asp Ile Arg Glu Leu Ile  
 65                                      70                                      75                                      80

Glu Val Asp Asp Val Met Glu Asp Asp Ser Leu Arg Phe Gly Pro Asn  
85 90 95

Gly Gly Leu Val Phe Cys Met Glu Tyr Phe Ala Asn Asn Phe Asp Trp  
100 105 110

Leu Glu Asn Cys Leu Gly His Val Glu Asp Asp Tyr Ile Leu Phe Asp  
115 120 125

Cys Pro Gly Gln Ile Glu Leu Tyr Thr His Leu Pro Val Met Lys Gln  
130 135 140

Leu Val Gln Gln Leu Glu Gln Trp Glu Phe Arg Val Cys Gly Val Phe  
145 150 155 160

Leu Val Asp Ser Gln Phe Met Val Glu Ser Phe Lys Phe Ile Ser Gly  
165 170 175

Ile Leu Ala Ala Leu Ser Ala Met Ile Ser Leu Glu Ile Pro Gln Val  
180 185 190

Asn Ile Met Thr Lys Met Asp Leu Leu Ser Lys Lys Ala Lys Lys Glu  
195 200 205

Ile Glu Lys Phe Leu Asp Pro Asp Met Tyr Ser Leu Leu Glu Asp Ser  
210 215 220

Thr Ser Asp Leu Arg Ser Lys Lys Phe Lys Lys Leu Thr Lys Ala Ile  
225 230 235 240

Cys Gly Leu Ile Asp Asp Tyr Ser Met Val Arg Phe Leu Pro Tyr Asp  
245 250 255

Gln Ser Asp Glu Glu Ser Met Asn Ile Val Leu Gln His Ile Asp Phe  
260 265 270

Ala Ile Gln Tyr Gly Glu Asp Leu Glu Phe Lys Glu Pro Lys Glu Arg  
275 280 285

Glu Asp Glu Ser Ser Ser Met Phe Asp Glu Tyr Phe Gln Glu Cys Gln  
290 295 300

Asp Glu  
305

&lt;210&gt; 1669

&lt;211&gt; 412

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1669

Glu Thr Glu Asp Val Met Glu Leu Leu Glu Glu Asp Leu Thr Cys Pro  
 1 5 10 15  
 Ile Cys Cys Ser Leu Phe Asp Asp Pro Arg Val Leu Pro Cys Ser His  
 20 25 30  
 Asn Phe Cys Lys Lys Cys Leu Glu Gly Ile Leu Glu Gly Ser Val Arg  
 35 40 45  
 Asn Ser Leu Trp Arg Pro Ala Pro Phe Lys Cys Pro Thr Cys Arg Lys  
 50 55 60  
 Glu Thr Ser Ala Thr Gly Ile Asn Ser Leu Gln Val Asn Tyr Ser Leu  
 65 70 75 80  
 Lys Gly Ile Val Glu Lys Tyr Asn Lys Ile Lys Ile Ser Pro Lys Met  
 85 90 95  
 Pro Val Cys Lys Gly His Leu Gly Gln Pro Leu Asn Ile Phe Cys Leu  
 100 105 110  
 Thr Asp Met Gln Leu Ile Cys Gly Ile Cys Ala Thr Arg Gly Glu His  
 115 120 125  
 Thr Lys His Val Phe Cys Ser Ile Glu Asp Ala Tyr Ala Gln Glu Arg  
 130 135 140  
 Asp Ala Phe Glu Ser Leu Phe Gln Ser Phe Glu Thr Trp Arg Arg Gly  
 145 150 155 160  
 Asp Ala Leu Ser Arg Leu Asp Thr Leu Glu Thr Ser Lys Arg Lys Ser  
 165 170 175  
 Leu Gln Leu Leu Thr Lys Asp Ser Asp Lys Val Lys Glu Phe Phe Glu  
 180 185 190  
 Lys Leu Gln His Thr Leu Asp Gln Lys Lys Asn Glu Ile Leu Ser Asp  
 195 200 205  
 Phe Glu Thr Met Lys Leu Ala Val Met Gln Ala Tyr Asp Pro Glu Ile  
 210 215 220  
 Asn Lys Leu Asn Thr Ile Leu Gln Glu Gln Arg Met Ala Phe Asn Ile  
 225 230 235 240  
 Ala Glu Ala Phe Lys Asp Val Ser Glu Pro Ile Val Phe Leu Gln Gln  
 245 250 255



Met Gln Glu Phe Arg Glu Lys Ile Lys Val Ile Lys Glu Thr Pro Leu  
 260 265 270

Pro Pro Ser Asn Leu Pro Ala Ser Pro Leu Met Lys Asn Phe Asp Thr  
 275 280 285

Ser Gln Trp Glu Asp Ile Lys Leu Val Asp Val Asp Lys Leu Ser Leu  
 290 295 300

Pro Gln Asp Thr Gly Thr Phe Ile Ser Lys Ile Pro Trp Ser Phe Tyr  
 305 310 315 320

Lys Leu Phe Leu Leu Ile Leu Leu Leu Gly Leu Val Ile Val Phe Gly  
 325 330 335

Pro Thr Met Phe Leu Glu Trp Ser Leu Phe Asp Asp Leu Ala Thr Trp  
 340 345 350

Lys Gly Cys Leu Ser Asn Phe Ser Ser Tyr Leu Thr Lys Thr Ala Asp  
 355 360 365

Phe Ile Glu Gln Ser Val Phe Tyr Trp Glu Gln Val Thr Asp Gly Phe  
 370 375 380

Phe Ile Phe Asn Glu Arg Phe Lys Asn Phe Thr Leu Val Val Leu Asn  
 385 390 395 400

Asn Val Ala Glu Phe Val Cys Lys Tyr Lys Leu Leu  
 405 410

<210> 1670

<211> 89

<212> PRT

<213> Homo sapiens

<400> 1670

Pro Glu Glu Ala Leu Glu Pro Glu Ala Met Ala His Tyr Pro Thr Arg  
 1 5 10 15

Leu Lys Thr Arg Lys Thr Tyr Ser Trp Val Gly Arg Pro Leu Leu Asp  
 20 25 30

Arg Lys Leu His Tyr Gln Thr Tyr Arg Glu Met Cys Val Lys Thr Glu  
 35 40 45

Gly Cys Ser Thr Glu Ile His Ile Gln Ile Gly Gln Phe Val Leu Ile  
 50 55 60

Glu Gly Asp Asp Asp Glu Asn Pro Tyr Val Ala Lys Leu Leu Glu Leu

65

70

75

80

Phe Glu Asp Asp Ser Asp Pro Pro Pro

85

&lt;210&gt; 1671

&lt;211&gt; 218

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1671

Asp Pro Arg Val Arg Ile Glu Ile Ile Thr Asp Arg Gln Ser Gly Lys  
 1 5 10 15

Lys Arg Gly Phe Gly Phe Val Thr Phe Asp Asp His Asp Pro Val Asp  
 20 25 30

Lys Ile Val Leu Gln Lys Tyr His Thr Ile Asn Gly His Asn Ala Glu  
 35 40 45

Val Arg Lys Ala Leu Ser Arg Gln Glu Met Gln Glu Val Gln Ser Ser  
 50 55 60

Arg Ser Gly Arg Gly Gly Asn Phe Gly Phe Gly Asp Ser Arg Gly Gly  
 65 70 75 80

Gly Gly Asn Phe Gly Pro Gly Pro Gly Ser Asn Phe Arg Gly Gly Ser  
 85 90 95

Asp Gly Tyr Gly Ser Gly Arg Gly Phe Gly Asp Gly Tyr Asn Gly Tyr  
 100 105 110

Gly Gly Gly Pro Gly Gly Gly Asn Phe Gly Gly Ser Pro Gly Tyr Gly  
 115 120 125

Gly Gly Arg Gly Gly Tyr Gly Gly Gly Gly Pro Gly Tyr Gly Asn Gln  
 130 135 140

Gly Gly Gly Tyr Gly Gly Gly Tyr Asp Asn Tyr Gly Gly Gly Asn Tyr  
 145 150 155 160

Gly Ser Gly Asn Tyr Asn Asp Phe Gly Asn Tyr Asn Gln Gln Pro Ser  
 165 170 175

Asn Tyr Gly Pro Met Lys Ser Gly Asn Phe Gly Gly Ser Arg Asn Met  
 180 185 190

Gly Gly Pro Tyr Gly Gly Gly Asn Tyr Gly Pro Gly Gly Ser Gly Gly  
 195 200 205

Ser Gly Gly Tyr Gly Gly Arg Ser Arg Tyr  
210 215

<210> 1672

<211> 575

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (186)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (555)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1672

Glu Glu Leu Arg Val Arg Glu His Val Thr Gly Gly Ile Cys Gly Gly  
1 5 10 15

Ser Gln Met Met Val Val Leu Leu Gly Ala Thr Thr Leu Val Leu Val  
20 25 30

Ala Val Ala Pro Trp Val Leu Ser Ala Ala Ala Gly Gly Lys Asn Leu  
35 40 45

Lys Ser Pro Gln Lys Val Glu Val Asp Ile Ile Asp Asp Asn Phe Ile  
50 55 60

Leu Arg Trp Asn Arg Ser Asp Glu Ser Val Gly Asn Val Thr Phe Ser  
65 70 75 80

Phe Asp Tyr Gln Lys Thr Gly Met Asp Asn Trp Ile Lys Leu Ser Gly  
85 90 95

Cys Gln Asn Ile Thr Ser Thr Lys Cys Asn Phe Ser Ser Leu Lys Leu  
100 105 110

Asn Val Tyr Glu Glu Ile Lys Leu Arg Ile Arg Ala Glu Lys Glu Asn  
115 120 125

Thr Ser Ser Trp Tyr Glu Val Asp Ser Phe Thr Pro Phe Arg Lys Ala  
130 135 140

Gln Ile Gly Pro Pro Glu Val His Leu Glu Ala Glu Asp Lys Ala Ile  
145 150 155 160

Val Ile His Ile Ser Pro Gly Thr Lys Asp Ser Val Met Trp Ala Leu  
165 170 175

Asp Gly Leu Ser Phe Thr Tyr Ser Leu Xaa Ile Trp Lys Asn Ser Ser  
180 185 190

Gly Val Glu Glu Arg Ile Glu Asn Ile Tyr Ser Arg His Lys Ile Tyr  
195 200 205

Lys Leu Ser Pro Glu Thr Thr Tyr Cys Leu Lys Val Lys Ala Ala Leu  
210 215 220

Leu Thr Ser Trp Lys Ile Gly Val Tyr Ser Pro Val His Cys Ile Lys  
225 230 235 240

Thr Thr Val Glu Asn Glu Leu Pro Pro Pro Glu Asn Ile Glu Val Ser  
245 250 255

Val Gln Asn Gln Asn Tyr Val Leu Lys Trp Asp Tyr Thr Tyr Ala Asn  
260 265 270

Met Thr Phe Gln Val Gln Trp Leu His Ala Phe Leu Lys Arg Asn Pro  
275 280 285

Gly Asn His Leu Tyr Lys Trp Lys Gln Ile Pro Asp Cys Glu Asn Val  
290 295 300

Lys Thr Thr Gln Cys Val Phe Pro Gln Asn Val Phe Gln Lys Gly Ile  
305 310 315 320

Tyr Leu Leu Arg Val Gln Ala Ser Asp Gly Asn Asn Thr Ser Phe Trp  
325 330 335

Ser Glu Glu Ile Lys Phe Asp Thr Glu Ile Gln Ala Phe Leu Leu Pro  
340 345 350

Pro Val Phe Asn Ile Arg Ser Leu Ser Asp Ser Phe His Ile Tyr Ile  
355 360 365

Gly Ala Pro Lys Gln Ser Gly Asn Thr Pro Val Ile Gln Asp Tyr Pro  
370 375 380

Leu Ile Tyr Glu Ile Ile Phe Trp Glu Asn Thr Ser Asn Ala Glu Arg  
385 390 395 400

Lys Ile Ile Glu Lys Lys Thr Asp Val Thr Val Pro Asn Leu Lys Pro  
405 410 415

Leu Thr Val Tyr Cys Val Lys Ala Arg Ala His Thr Met Asp Glu Lys  
420 425 430

Leu Asn Lys Ser Ser Val Phe Ser Asp Ala Val Cys Glu Lys Thr Lys  
 435 440 445

Pro Gly Asn Thr Ser Lys Ile Trp Leu Ile Val Gly Ile Cys Ile Ala  
 450 455 460

Leu Phe Ala Leu Pro Phe Val Ile Tyr Ala Ala Lys Val Phe Leu Arg  
 465 470 475 480

Cys Ile Asn Tyr Val Phe Phe Pro Ser Leu Lys Pro Ser Ser Ser Ile  
 485 490 495

Asp Glu Tyr Phe Ser Glu Gln Pro Leu Lys Asn Leu Leu Leu Ser Thr  
 500 505 510

Ser Glu Glu Gln Ile Glu Lys Cys Phe Ile Ile Glu Asn Ile Ser Thr  
 515 520 525

Ile Ala Thr Val Glu Glu Thr Asn Gln Thr Asp Glu Asp His Lys Lys  
 530 535 540

Tyr Ser Ser Gln Thr Ser Gln Asp Ser Gly Xaa Tyr Ser Asn Glu Asp  
 545 550 555 560

Glu Ser Glu Ser Lys Thr Ser Glu Glu Leu Gln Gln Asp Phe Val  
 565 570 575

<210> 1673

<211> 571

<212> PRT

<213> Homo sapiens

<400> 1673

Asp Ala Trp Glu Leu Ser Arg Gly Gly Pro Phe Glu Arg Ile Ala Leu  
 1 5 10 15

Gln Pro Leu Ile Pro Pro Ala Ser Pro Pro Val Glu Ala Gln Ala Arg  
 20 25 30

Phe Ala Ala Phe Ser Leu Cys Leu Ile Thr Met Ser Thr Asn Glu Asn  
 35 40 45

Ala Asn Thr Pro Ala Ala Arg Leu His Arg Phe Lys Asn Lys Gly Lys  
 50 55 60

Asp Ser Thr Glu Met Arg Arg Arg Arg Ile Glu Val Asn Val Glu Leu  
 65 70 75 80

Arg Lys Ala Lys Lys Asp Asp Gln Met Leu Lys Arg Arg Asn Val Ser  
                                     85                                    90                                    95

Ser Phe Pro Asp Asp Ala Thr Ser Pro Leu Gln Glu Asn Arg Asn Asn  
                                     100                                    105                                    110

Gln Gly Thr Val Asn Trp Ser Val Asp Asp Ile Val Lys Gly Ile Asn  
                                     115                                    120                                    125

Ser Ser Asn Val Glu Asn Gln Leu Gln Ala Thr Gln Ala Ala Arg Lys  
                                     130                                    135                                    140

Leu Leu Ser Arg Glu Lys Gln Pro Pro Ile Asp Asn Ile Ile Arg Ala  
 145                                    150                                    155                                    160

Gly Leu Ile Pro Lys Phe Val Ser Phe Leu Gly Arg Thr Asp Cys Ser  
                                     165                                    170                                    175

Pro Ile Gln Phe Glu Ser Ala Trp Ala Leu Thr Asn Ile Ala Ser Gly  
                                     180                                    185                                    190

Thr Ser Glu Gln Thr Lys Ala Val Val Asp Gly Gly Ala Ile Pro Ala  
                                     195                                    200                                    205

Phe Ile Ser Leu Leu Ala Ser Pro His Ala His Ile Ser Glu Gln Ala  
                                     210                                    215                                    220

Val Trp Ala Leu Gly Asn Ile Ala Gly Asp Gly Ser Val Phe Arg Asp  
 225                                    230                                    235                                    240

Leu Val Ile Lys Tyr Gly Ala Val Asp Pro Leu Leu Ala Leu Leu Ala  
                                     245                                    250                                    255

Val Pro Asp Met Ser Ser Leu Ala Cys Gly Tyr Leu Arg Asn Leu Thr  
                                     260                                    265                                    270

Trp Thr Leu Ser Asn Leu Cys Arg Asn Lys Asn Pro Ala Pro Pro Ile  
                                     275                                    280                                    285

Asp Ala Val Glu Gln Ile Leu Pro Thr Leu Val Arg Leu Leu His His  
                                     290                                    295                                    300

Asp Asp Pro Glu Val Leu Ala Asp Thr Cys Trp Ala Ile Ser Tyr Leu  
 305                                    310                                    315                                    320

Thr Asp Gly Pro Asn Glu Arg Ile Gly Met Val Val Lys Thr Gly Val  
                                     325                                    330                                    335

Val Pro Gln Leu Val Lys Leu Leu Gly Ala Ser Glu Leu Pro Ile Val  
                                     340                                    345                                    350

Thr Pro Ala Leu Arg Ala Ile Gly Asn Ile Val Thr Gly Thr Asp Glu  
355 360 365

Gln Thr Gln Val Val Ile Asp Ala Gly Ala Leu Ala Val Phe Pro Ser  
370 375 380

Leu Leu Thr Asn Pro Lys Thr Asn Ile Gln Lys Glu Ala Thr Trp Thr  
385 390 395 400

Met Ser Asn Ile Thr Ala Gly Arg Gln Asp Gln Ile Gln Gln Val Val  
405 410 415

Asn His Gly Leu Val Pro Phe Leu Val Ser Val Leu Ser Lys Ala Asp  
420 425 430

Phe Lys Thr Gln Lys Glu Ala Val Trp Ala Val Thr Asn Tyr Thr Ser  
435 440 445

Gly Gly Thr Val Glu Gln Ile Val Tyr Leu Val His Cys Gly Ile Ile  
450 455 460

Glu Pro Leu Met Asn Leu Leu Thr Ala Lys Asp Thr Lys Ile Ile Leu  
465 470 475 480

Val Ile Leu Asp Ala Ile Ser Asn Ile Phe Gln Ala Ala Glu Lys Leu  
485 490 495

Gly Glu Thr Glu Lys Leu Ser Ile Met Ile Glu Glu Cys Gly Gly Leu  
500 505 510

Asp Lys Ile Glu Ala Leu Gln Asn His Glu Asn Glu Ser Val Tyr Lys  
515 520 525

Ala Ser Leu Ser Leu Ile Glu Lys Tyr Phe Ser Val Glu Glu Glu Glu  
530 535 540

Asp Gln Asn Val Val Pro Glu Thr Thr Ser Glu Gly Tyr Thr Phe Gln  
545 550 555 560

Val Gln Asp Gly Ala Pro Gly Thr Phe Asn Phe  
565 570

&lt;210&gt; 1674

&lt;211&gt; 375

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

<222> (338)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (340)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (356)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (372)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1674

Ser Glu Pro Leu Gly Arg Phe Leu Leu Phe Arg Arg Leu His Ser Val  
1 5 10 15

Pro Arg Gly Ser Ala Leu Cys Ala Met Asp Gly Ile Val Pro Asp Ile  
20 25 30

Ala Val Gly Thr Lys Arg Gly Ser Asp Glu Leu Phe Ser Thr Cys Val  
35 40 45

Thr Asn Gly Pro Phe Ile Met Ser Ser Asn Ser Ala Ser Ala Ala Asn  
50 55 60

Gly Asn Asp Ser Lys Lys Phe Lys Gly Asp Ser Arg Ser Ala Gly Val  
65 70 75 80

Pro Ser Arg Val Ile His Ile Arg Lys Leu Pro Ile Asp Val Thr Glu  
85 90 95

Gly Glu Val Ile Ser Leu Gly Leu Pro Phe Gly Lys Val Thr Asn Leu  
100 105 110

Leu Met Leu Lys Gly Lys Asn Gln Ala Phe Ile Glu Met Asn Thr Glu  
115 120 125

Glu Ala Ala Asn Thr Met Val Asn Tyr Tyr Thr Ser Val Thr Pro Val  
130 135 140

Leu Arg Gly Gln Pro Ile Tyr Ile Gln Phe Ser Asn His Lys Glu Leu  
145 150 155 160

Lys Thr Asp Ser Ser Pro Asn Gln Ala Arg Ala Gln Ala Ala Leu Gln  
165 170 175



Ala Val Asn Ser Val Gln Ser Gly Asn Leu Ala Leu Ala Ala Ser Ala  
180 185 190

Ala Ala Val Asp Ala Gly Met Ala Met Ala Gly Gln Ser Pro Val Leu  
195 200 205

Arg Ile Ile Val Glu Asn Leu Phe Tyr Pro Val Thr Leu Asp Val Leu  
210 215 220

His Gln Ile Phe Ser Lys Phe Gly Thr Val Leu Lys Ile Ile Thr Phe  
225 230 235 240

Thr Lys Asn Asn Gln Phe Gln Ala Leu Leu Gln Tyr Ala Asp Pro Val  
245 250 255

Ser Ala Gln His Ala Lys Leu Ser Leu Asp Gly Gln Asn Ile Tyr Asn  
260 265 270

Ala Cys Cys Thr Leu Arg Ile Asp Phe Ser Lys Leu Thr Ser Leu Asn  
275 280 285

Val Lys Tyr Asn Asn Asp Lys Ser Arg Asp Tyr Thr Arg Pro Asp Leu  
290 295 300

Pro Ser Gly Asp Ser Gln Pro Ser Leu Asp Gln Thr Met Ala Ala Ala  
305 310 315 320

Phe Gly Ala Pro Gly Ile Ile Ser Ala Ser Pro Tyr Ala Gly Ala Gly  
325 330 335

Phe Xaa Pro Xaa Phe Ala Ile Pro Gln Ala Ala Gly Phe Pro Phe Arg  
340 345 350

Thr Ser Thr Xaa Pro Trp Pro Leu Ala Arg Thr Glu Pro Arg Trp Leu  
355 360 365

Leu Ile Ala Xaa Gly Thr Ala  
370 375

&lt;210&gt; 1675

&lt;211&gt; 193

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (190)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1675

Pro Arg Phe Ser Val Phe Cys Ser Arg Leu Arg Arg Glu Arg Arg Arg  
1 5 10 15

Arg Trp Arg Leu Arg Arg Glu Thr Ala Arg Arg Ser Glu Arg Ala Leu  
20 25 30

Arg Leu Pro Pro Pro Gln Gln Arg Arg Arg Arg His Arg Ser Ser  
35 40 45

Pro Asp Arg Ser Arg Ser Leu Pro Ser Pro Ala Ile Arg Ala Pro Leu  
50 55 60

Pro Asp Leu Tyr Pro Phe Gly Thr Met Arg Gly Gly Gly Phe Gly Asp  
65 70 75 80

Arg Asp Arg Asp Arg Asp Arg Gly Gly Phe Gly Ala Arg Gly Gly Gly  
85 90 95

Gly Leu Pro Pro Lys Lys Phe Gly Asn Pro Gly Glu Arg Leu Arg Lys  
100 105 110

Lys Lys Trp Asp Leu Ser Glu Leu Pro Lys Phe Glu Lys Asn Phe Tyr  
115 120 125

Val Glu His Pro Glu Val Ala Arg Leu Thr Pro Tyr Glu Val Asp Glu  
130 135 140

Leu Arg Arg Lys Lys Glu Ile Thr Val Arg Gly Gly Asp Val Cys Pro  
145 150 155 160

Lys Pro Val Phe Ala Phe His His Ala Asn Phe Pro Gln Tyr Val Met  
165 170 175

Asp Val Leu Met Asp Ser Arg Thr Leu Gln Asp Asn Ile Xaa Gly Arg  
180 185 190

Leu

&lt;210&gt; 1676

&lt;211&gt; 365

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (47)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (220)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1676

His Glu Gly Met Phe Pro Pro Phe Lys Val Arg Cys Ser Gly Leu Asp  
1 5 10 15

Lys Lys Ala Lys Tyr Ile Leu Leu Met Asp Ile Ile Ala Ala Asp Asp  
20 25 30

Cys Arg Tyr Lys Phe His Asn Ser Arg Trp Met Val Ala Gly Xaa Ala  
35 40 45

Asp Pro Glu Met Pro Lys Arg Met Tyr Ile His Pro Asp Ser Pro Ala  
50 55 60

Thr Gly Glu Gln Trp Met Ser Lys Val Val Thr Phe His Lys Leu Lys  
65 70 75 80

Leu Thr Asn Asn Ile Ser Asp Lys His Gly Phe Thr Leu Ala Phe Pro  
85 90 95

Ser Asp His Ala Thr Trp Gln Gly Asn Tyr Ser Phe Gly Thr Gln Thr  
100 105 110

Ile Leu Asn Ser Met His Lys Tyr Gln Pro Arg Phe His Ile Val Arg  
115 120 125

Ala Asn Asp Ile Leu Lys Leu Pro Tyr Ser Thr Phe Arg Thr Tyr Leu  
130 135 140

Phe Pro Glu Thr Glu Phe Ile Ala Val Thr Ala Tyr Gln Asn Asp Lys  
145 150 155 160

Ile Thr Gln Leu Lys Ile Asp Asn Asn Pro Phe Ala Lys Gly Phe Arg  
165 170 175

Asp Thr Gly Asn Gly Arg Arg Glu Lys Arg Lys Gln Leu Thr Leu Gln  
180 185 190

Ser Met Arg Val Phe Asp Glu Arg His Lys Lys Glu Asn Gly Thr Ser  
195 200 205

Asp Glu Ser Ser Ser Glu Gln Ala Ala Phe Asn Xaa Phe Ala Gln Ala  
210 215 220

Ser Ser Pro Ala Ala Ser Thr Val Gly Thr Ser Asn Leu Lys Asp Leu



35	40	45
Asp Ile Leu Asn Ser Ala Gly Lys Met Asp Lys Met Arg Leu Leu Asn		
50	55	60
Ile Leu Met Gln Leu Xaa Xaa Cys Cys Asn His Pro Tyr Leu Phe Asp		
65	70	75 80
Gly Ala Glu Pro Gly Pro Pro Tyr Thr Thr Asp Met His Leu Val Thr		
85	90	95
Asn Ser Gly Lys Met Val Val Leu Asp Lys Leu Leu Pro Lys Leu Lys		
100	105	110
Glu Gln Gly Ser Arg Val Leu Ile Phe Ser Gln Met Thr Arg Val Leu		
115	120	125
Asp Ile Leu Glu Asp Tyr Cys Met Trp Arg Asn Tyr Glu Tyr Cys Arg		
130	135	140
Leu Asp Gly Gln Thr Pro His Asp Glu Arg Gln Asp Ser Ile Asn Ala		
145	150	155 160
Tyr Asn Glu Pro Asn Ser Thr Lys Phe Val Phe Met Leu Ser Thr Arg		
165	170	175
Ala Gly Gly Leu Gly Ile Asn Leu Ala Thr Ala Asp Val Val Ile Leu		
180	185	190
Tyr Asp Ser Asp Trp Asn Pro Gln Val Asp Leu Gln Ala Met Asp Arg		
195	200	205
Ala His Arg Ile Gly Gln Thr Lys Thr Val Arg Val Phe Arg Phe Ile		
210	215	220
Thr Asp Asn Thr Val Glu Glu Arg Ile Val Glu Arg Ala Glu Met Lys		
225	230	235 240
Leu Arg Leu Asp Ser Ile Val Ile Gln Gln Gly Arg Leu Val Asp Gln		
245	250	255
Asn Leu Asn Lys Ile Gly Lys Asp Glu Met Leu Gln Met Ile Arg His		
260	265	270
Gly Ala Thr His Val Phe Ala Ser Lys Glu Ser Glu Ile Thr Asp Glu		
275	280	285
Asp Ile Asp Gly Ile Leu Glu Arg Gly Ala Lys Lys Thr Ala Glu Met		
290	295	300
Asn Glu Lys Leu Ser Lys Met Gly Glu Ser Ser Leu Arg Asn Phe Thr		

305                      310                      315                      320  
 Met Asp Thr Glu Ser Ser Val Tyr Asn Phe Glu Gly Glu Asp Tyr Arg  
                          325                      330                      335  
 Glu Lys Gln Lys Ile Ala Phe Thr Glu Trp Ile Glu Pro Pro Lys Arg  
                          340                      345                      350  
 Glu Arg Lys Ala Asn Tyr Ala Val Asp Ala Tyr Phe Arg Glu Ala Leu  
                          355                      360                      365  
 Arg Val Ser Glu Pro Lys Ala Pro Lys Ala Pro Arg Pro Pro Lys Gln  
                          370                      375                      380  
 Pro Asn Val Gln Asp Phe Gln Phe Phe Pro Pro Arg Leu Phe Glu Leu  
 385                      390                      395                      400  
 Leu Glu Lys Glu Ile Leu Phe Tyr Arg Lys Thr Ile Gly Tyr Lys Val  
                          405                      410                      415  
 Pro Arg Asn Pro Glu Leu Pro Asn Ala Ala Gln Ala Gln Lys Glu Glu  
                          420                      425                      430  
 Gln Leu Lys Ile Asp Glu Ala Glu Ser Leu Asn Asp Glu Glu Leu Glu  
                          435                      440                      445  
 Glu Lys Glu Lys Leu Leu Thr Gln Gly Phe Thr Asn Trp Asn Lys Arg  
                          450                      455                      460  
 Asp Phe Asn Gln Phe Ile Lys Ala Asn Glu Lys Trp Gly Arg Asp Asp  
 465                      470                      475                      480  
 Ile Glu Asn Ile Ala Arg Glu Val Glu Gly Lys Thr Pro Glu Glu Val  
                          485                      490                      495  
 Ile Glu Tyr Ser Ala Val Phe Trp Glu Arg Cys Asn Glu Leu Gln Asp  
                          500                      505                      510  
 Ile Glu Lys Ile Met Ala Gln Ile Glu Arg Gly Glu Ala Arg Ile Gln  
                          515                      520                      525  
 Arg Arg Ile Ser Ile Lys Lys Ala Leu Asp Thr Lys Ile Gly Arg Tyr  
                          530                      535                      540  
 Lys Ala Pro Phe His Gln Leu Arg Ile Ser Tyr Gly Thr Asn Lys Gly  
 545                      550                      555                      560  
 Lys Asn Tyr Thr Glu Glu Glu Asp Arg Phe Leu Ile Cys Met Leu His  
                          565                      570                      575  
 Lys Leu Gly Phe Asp Lys Glu Asn Val Tyr Asp Glu Leu Arg Gln Cys

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<400> 1678
Gly Arg Lys Arg Pro Leu Pro Xaa Lys Gly Trp Ser Arg Ala Gly Ala
 1             5             10             15
Met Trp Ser Ala Gly Arg Gly Gly Ala Ala Trp Pro Val Leu Leu Gly
      20             25             30
Leu Leu Leu Ala Leu Leu Val Pro Gly Gly Gly Ala Ala Lys Thr Gly
      35             40             45
Ala Glu Leu Val Thr Cys Gly Ser Val Leu Lys Leu Leu Asn Thr His
      50             55             60
His Arg Val Arg Leu His Ser His Asp Ile Lys Tyr Gly Ser Gly Ser
 65             70             75             80
Gly Gln Gln Ser Val Thr Gly Val Glu Ala Ser Asp Asp Ala Asn Ser
      85             90             95
Tyr Trp Arg Ile Arg Gly Gly Ser Glu Gly Gly Cys Pro Arg Gly Ser
      100            105            110

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Pro Val Arg Cys Gly Gln Ala Val Arg Leu Thr His Val Leu Thr Gly  
 115 120 125

Lys Asn Leu His Thr His His Phe Pro Ser Pro Leu Ser Asn Asn Gln  
 130 135 140

Glu Val Ser Ala Phe Gly Glu Asp Gly Glu Gly Asp Asp Leu Asp Leu  
 145 150 155 160

Trp Thr Val Arg Cys Ser Gly Gln His Trp Glu Arg Glu Ala Ala Val  
 165 170 175

Arg Phe Gln His Val Gly Thr Ser Val Phe Leu Ser Val Thr Gly Glu  
 180 185 190

Gln Tyr Gly Ser Pro Ile Arg Gly Gln His Glu Val His Gly Met Pro  
 195 200 205

Ser Ala Asn Thr His Asn Thr Trp Lys Ala Met Glu Gly Ile Phe Ile  
 210 215 220

Lys Pro Ser Val Glu Pro Ser Ala Gly His Asp Glu Leu  
 225 230 235

<210> 1679

<211> 168

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (101)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (118)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (144)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1679

Glu His Tyr Ser Cys Phe Leu Phe Gln Asn Pro Thr Pro His Pro Ser  
 1 5 10 15

Cys Asp Ala Met Ser Thr Asn Ile Cys Ser Phe Lys Asp Arg Cys Val



20 25 30  
Ser Ile Leu Cys Cys Lys Phe Cys Lys Gln Val Leu Ser Ser Arg Gly  
35 40 45  
Met Lys Ala Val Leu Leu Ala Asp Thr Glu Ile Asp Leu Phe Ser Thr  
50 55 60  
Asp Ile Pro Pro Thr Asn Ala Val Asp Phe Thr Gly Arg Cys Tyr Phe  
65 70 75 80  
Thr Lys Ile Cys Lys Cys Lys Leu Lys Asp Ile Ala Cys Leu Lys Cys  
85 90 95  
Gly Asn Ile Val Xaa Tyr His Val Ile Val Pro Cys Ser Ser Cys Leu  
100 105 110  
Leu Ser Cys Asn Asn Xaa His Phe Trp Met Phe His Ser Gln Ala Val  
115 120 125  
Tyr Asp Ile Asn Arg Leu Asp Ser Thr Gly Val Asn Val Leu Leu Xaa  
130 135 140  
Gly Asn Leu Pro Glu Ile Glu Glu Ser Thr Asp Glu Asp Val Leu Asn  
145 150 155 160  
Ile Ser Ala Glu Glu Cys Ile Arg  
165

<210> 1680

<211> 519

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (321)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (332)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (333)

<223> Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (337)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (511)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1680

Lys Thr Glu Arg Lys Gln Glu Gly Arg Ser Leu Leu Phe Glu Phe Val  
1 5 10 15

Ala Arg Glu Ala Leu Gln Ser Gly Leu Ala Leu Gly Tyr Trp Leu Gly  
20 25 30

Pro Met Leu Gly Thr Leu Arg Ala Met Glu Gly Glu Asp Val Glu Asp  
35 40 45

Asp Gln Leu Leu Gln Lys Leu Arg Ala Ser Arg Arg Arg Phe Gln Arg  
50 55 60

Arg Met Gln Arg Leu Ile Glu Lys Tyr Asn Gln Pro Phe Glu Asp Thr  
65 70 75 80

Pro Val Val Gln Met Ala Thr Leu Thr Tyr Glu Thr Pro Gln Gly Leu  
85 90 95

Arg Ile Trp Gly Gly Arg Leu Ile Lys Glu Arg Asn Lys Gly Glu Ile  
100 105 110

Gln Asp Ser Ser Met Lys Pro Ala Asp Arg Thr Asp Gly Ser Val Gln  
115 120 125

Ala Ala Ala Trp Gly Pro Glu Leu Pro Ser His Arg Thr Val Leu Gly  
130 135 140

Ala Asp Ser Lys Ser Gly Glu Val Asp Ala Thr Ser Asp Gln Glu Glu  
145 150 155 160

Ser Val Ala Trp Ala Leu Ala Pro Ala Val Pro Gln Ser Pro Leu Lys  
165 170 175

Asn Glu Leu Arg Arg Lys Tyr Leu Thr Gln Val Asp Ile Leu Leu Gln  
180 185 190

Gly Ala Glu Tyr Phe Glu Cys Ala Gly Asn Arg Ala Gly Arg Asp Val  
195 200 205

Arg Val Thr Pro Leu Pro Ser Leu Ala Ser Pro Ala Val Pro Ala Pro

210	215	220
Gly Tyr Cys Ser Arg Ile Ser Gly Lys Ser Pro Gly Asp Pro Ala Lys		
225	230	235 240
Pro Ala Ser Ser Pro Arg Glu Trp Asp Pro Leu His Pro Ser Ser Thr		
	245	250 255
Asp Met Ala Leu Val Pro Arg Asn Asp Ser Leu Ser Leu Gln Glu Thr		
	260	265 270
Ser Ser Ser Ser Phe Leu Ser Ser Gln Pro Phe Glu Asp Asp Asp Ile		
	275	280 285
Cys Asn Val Thr Ile Ser Asp Leu Tyr Ala Gly Met Leu His Ser Met		
	290	295 300
Ser Arg Leu Leu Ser Thr Lys Pro Ser Ser Ile Ile Ser Thr Lys Thr		
305	310	315 320
Xaa Ile Met Gln Asn Trp Asn Ser Arg Arg Arg Xaa Xaa Tyr Lys Ser		
	325	330 335
Xaa Met Asn Lys Thr Tyr Cys Lys Gly Ala Arg Arg Ser Gln Arg Ser		
	340	345 350
Ser Lys Glu Asn Phe Ile Pro Cys Ser Glu Pro Val Lys Gly Thr Gly		
	355	360 365
Ala Leu Arg Asp Cys Lys Asn Val Leu Asp Val Ser Cys Arg Lys Thr		
	370	375 380
Gly Leu Lys Leu Glu Lys Ala Phe Leu Glu Val Asn Arg Pro Gln Ile		
385	390	395 400
His Lys Leu Asp Pro Ser Trp Lys Glu Arg Lys Val Thr Pro Ser Lys		
	405	410 415
Tyr Ser Ser Leu Ile Tyr Phe Asp Ser Ser Ala Thr Tyr Asn Leu Asp		
	420	425 430
Glu Glu Asn Arg Phe Arg Thr Leu Lys Trp Leu Ile Ser Pro Val Lys		
	435	440 445
Ile Val Ser Arg Pro Thr Ile Arg Gln Gly His Gly Glu Asn Arg Gln		
	450	455 460
Arg Glu Ile Glu Ile Arg Phe Asp Gln Leu His Arg Glu Tyr Cys Leu		
465	470	475 480
Ser Pro Arg Asn Gln Pro Arg Arg Met Cys Leu Pro Asp Ser Trp Ala		

485

490

495

Met Asn Met Tyr Arg Gly Gly Pro Ala Lys Ser Trp Trp Pro Xaa Gly  
 500 505 510

Leu Lys Thr Arg Lys Leu Ser  
 515

&lt;210&gt; 1681

&lt;211&gt; 371

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1681

Val Pro Cys Tyr Arg Arg Val Phe Ile Val Ser Ser Ser Gln Leu Gly  
 1 5 10 15

Glu Gln Leu Lys Gln Leu Val Pro Ala Ser Gly Leu Thr Val Met Asp  
 20 25 30

Leu Glu Ala Glu Gly Thr Cys Leu Arg Phe Ser Pro Leu Met Thr Ala  
 35 40 45

Ala Val Leu Gly Thr Arg Gly Glu Asp Val Asp Gln Leu Val Ala Cys  
 50 55 60

Ile Glu Ser Lys Leu Pro Val Leu Cys Cys Thr Leu Gln Leu Arg Glu  
 65 70 75 80

Glu Phe Lys Gln Glu Val Glu Ala Thr Ala Gly Leu Leu Tyr Val Asp  
 85 90 95

Asp Pro Asn Trp Ser Gly Ile Gly Val Val Arg Tyr Glu His Ala Asn  
 100 105 110

Asp Asp Lys Ser Ser Leu Lys Ser Asp Pro Glu Gly Glu Asn Ile His  
 115 120 125

Ala Gly Leu Leu Lys Lys Leu Asn Glu Leu Glu Ser Asp Leu Thr Phe  
 130 135 140

Lys Ile Gly Pro Glu Tyr Lys Ser Met Lys Ser Cys Leu Tyr Val Gly  
 145 150 155 160

Met Ala Ser Asp Asn Val Asp Ala Ala Glu Leu Val Glu Thr Ile Ala  
 165 170 175

Ala Thr Ala Arg Glu Ile Glu Glu Asn Ser Arg Leu Leu Glu Asn Met  
 180 185 190

Thr Glu Val Val Arg Lys Gly Ile Gln Glu Ala Gln Val Glu Leu Gln  
 195 200 205

Lys Ala Ser Glu Glu Arg Leu Leu Glu Glu Gly Val Leu Arg Gln Ile  
 210 215 220

Pro Val Val Gly Ser Val Leu Asn Trp Phe Ser Pro Val Gln Ala Leu  
 225 230 235 240

Gln Lys Gly Arg Thr Phe Asn Leu Thr Ala Gly Ser Leu Glu Ser Thr  
 245 250 255

Glu Pro Ile Tyr Val Tyr Lys Ala Gln Gly Ala Gly Val Thr Leu Pro  
 260 265 270

Pro Thr Pro Ser Gly Ser Arg Thr Lys Gln Arg Leu Pro Gly Gln Lys  
 275 280 285

Pro Phe Lys Arg Ser Leu Arg Gly Ser Asp Ala Leu Ser Glu Thr Ser  
 290 295 300

Ser Val Ser His Ile Glu Asp Leu Glu Lys Val Glu Arg Leu Ser Ser  
 305 310 315 320

Gly Pro Glu Gln Ile Thr Leu Glu Ala Ser Ser Thr Glu Gly His Pro  
 325 330 335

Gly Ala Pro Ser Pro Gln His Thr Asp Gln Thr Glu Ala Phe Gln Lys  
 340 345 350

Gly Val Pro His Pro Glu Asp Asp His Ser Gln Val Glu Gly Pro Glu  
 355 360 365

Ser Leu Arg  
 370

<210> 1682

<211> 238

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (2)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (69)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (145)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (215)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (228)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1682

Ser Xaa Arg Gly Thr Ser Pro Ser Glu Phe Tyr Phe Met Phe Gln Gln  
1 5 10 15

Val Arg Val Lys Pro Gln Asp Phe Ala Ala Ile Thr Ile Pro Arg Ser  
20 25 30

Arg Gly Glu Ala Arg Val Gly Ala Gly Phe Arg Pro Met Leu Pro Ser  
35 40 45

Gln Gly Ala Pro Gln Arg Pro Leu Ser Thr Phe Ser Pro Ala Pro Lys  
50 55 60

Ala Thr Leu Ile Xaa Asn Ser Ile Gly Ser Leu Ser Lys Leu Arg Pro  
65 70 75 80

Gln Pro Leu Thr Phe Ser Pro Ser Trp Gly Gly Pro Lys Ser Leu Pro  
85 90 95

Val Pro Ala Pro Pro Gly Glu Met Gly Thr Thr Pro Ser Ala Pro Pro  
100 105 110

Gln Arg Asn Arg Arg Lys Ser Val His Arg Val Leu Ala Glu Leu Asp  
115 120 125

Asp Glu Ser Glu Pro Pro Glu Asn Pro Pro Pro Val Leu Met Glu Pro  
130 135 140

Xaa Lys Lys Leu Arg Val Asp Lys Ala Pro Leu Thr Pro Thr Gly Asn  
145 150 155 160

Arg Arg Gly Arg Pro Arg Lys Tyr Pro Val Ser Ala Pro Met Ala Pro  
165 170 175

Pro Ala Val Gly Gly Gly Glu Pro Cys Ala Ala Pro Cys Cys Cys Leu  
180 185 190

Pro Gln Glu Glu Thr Val Ala Trp Val Gln Cys Asp Gly Cys Asp Val  
195 200 205

Trp Phe His Val Ala Cys Xaa Gly Cys Ser Ile Gln Ala Ala Arg Glu  
210 215 220

Ala Asp Phe Xaa Cys Pro Gly Cys Arg Ala Gly Ile Gln Thr  
225 230 235

<210> 1683

<211> 66

<212> PRT

<213> Homo sapiens

<400> 1683

Met Ile Ala Thr Glu Thr Gln Ser Ser Phe Phe Ala Arg Val Phe Trp  
1 5 10 15

Gly Phe Cys Pro Lys Ile Tyr Pro Gly His Ser Ile Thr Ala Val Leu  
20 25 30

Asp Val Tyr Pro Lys Leu Pro His His Pro Ser Thr His Ser Cys Thr  
35 40 45

Phe Ile Tyr Leu Phe Cys Ser Ser Leu Gly Asp Arg Val Arg Leu Arg  
50 55 60

Leu Gly  
65

<210> 1684

<211> 119

<212> PRT

<213> Homo sapiens

<400> 1684

Trp Pro Leu Glu Phe Val Trp Pro Pro Pro Arg Glu Arg Glu Pro Gly  
1 5 10 15

Asn Phe Ser Thr Glu Lys Gly Glu Ala Phe Gly Leu Cys Arg Val Arg  
20 25 30

Val Ser Lys Cys Pro Ala Pro Ala Gly Met Glu Asp Pro Gln Ser Lys

35                                      40                                      45  
 Glu Pro Ala Gly Glu Ala Val Ala Leu Ala Leu Leu Glu Ser Pro Arg  
     50                                      55                                      60  
 Pro Glu Gly Gly Glu Glu Pro Pro Arg Pro Ser Pro Glu Glu Thr Gln  
     65                                      70                                      75                                      80  
 Gln Cys Lys Phe Asp Gly Gln Glu Thr Lys Gly Ser Lys Phe Ile Thr  
                                     85                                      90                                      95  
 Ser Ser Ala Ser Asp Phe Ser Asp Pro Val Tyr Lys Glu Ile Ala Ile  
                                     100                                      105                                      110  
 Thr Asn Gly Cys Ile Asn Arg  
                                     115

<210> 1685  
 <211> 91  
 <212> PRT  
 <213> Homo sapiens

<400> 1685  
 Ile Val Phe Leu Pro Glu Asp Ser Tyr Leu His Val Ser Gln Gly Leu  
     1                                      5                                      10                                      15  
 Gln Phe Phe Tyr Lys Phe Pro Tyr Pro Lys Phe Arg Ile His Val Lys  
                                     20                                      25                                      30  
 Tyr Phe Phe Gly Ala Lys Val Leu His Ser Trp Tyr Leu Leu Asp Trp  
                                     35                                      40                                      45  
 Lys Ser Val Ala Arg Cys Cys Leu Lys Leu Pro Tyr Cys Phe Phe Ile  
                                     50                                      55                                      60  
 Leu Tyr Leu Ala Leu Trp Leu Leu Asn Phe Leu Phe Leu Phe Glu Val  
     65                                      70                                      75                                      80  
 Ser Phe Lys Phe Ala Pro Met Leu Asn Tyr Leu  
                                     85                                      90

<210> 1686  
 <211> 141  
 <212> PRT  
 <213> Homo sapiens

<400> 1686



Glu Ala Val Ala Glu Val Ser Ser Leu Phe Pro Arg Leu Phe Gln Ile  
 1 5 10 15

Phe Val Ile Ala Val Val Ser Leu Val Ile Leu Pro Arg Ile Val Ile  
 20 25 30

Phe Arg Arg Met Ala Cys Tyr Asn Cys Gly Arg Gly Gly His Ile Ala  
 35 40 45

Lys Asp Cys Lys Glu Pro Lys Arg Glu Arg Glu Gln Cys Cys Tyr Asn  
 50 55 60

Cys Gly Lys Pro Gly His Leu Ala Arg Asp Cys Asp His Ala Asp Glu  
 65 70 75 80

Gln Lys Cys Tyr Ser Cys Gly Glu Phe Gly His Ile Gln Lys Asp Cys  
 85 90 95

Thr Lys Val Lys Cys Tyr Arg Cys Gly Glu Thr Gly His Val Ala Ile  
 100 105 110

Asn Cys Ser Lys Thr Ser Glu Val Asn Cys Tyr Arg Cys Gly Glu Ser  
 115 120 125

Gly His Leu Ala Arg Glu Cys Thr Ile Glu Ala Thr Ala  
 130 135 140

<210> 1687

<211> 83

<212> PRT

<213> Homo sapiens

<400> 1687

Phe Trp Ile Pro Trp Trp Arg Lys Ile Lys His Ser Gly Leu Ala Ala  
 1 5 10 15

Asn Asp Ala Ser Val Thr Ala Gly Val Phe Met Ser Ser Arg Gly His  
 20 25 30

Ser Thr Leu Pro Arg Thr Leu Met Ala Pro Arg Met Ile Ser Glu Gly  
 35 40 45

Asp Ile Gly Gly Ile Ala Gln Ile Thr Ser Ser Leu Phe Leu Gly Arg  
 50 55 60

Gly Ser Val Ala Ser Asn Arg His Leu Leu Gln Ala Arg Gly His His  
 65 70 75 80

Leu His Cys

&lt;210&gt; 1688

&lt;211&gt; 153

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1688

Arg Arg His Pro Ala Val Val Ala Glu Val Ser Pro Ala Tyr Phe Leu  
1 5 10 15

Phe Pro Ser Glu Arg Ala Ala Ala Leu Ala Ala Cys Ala Ala Met Ala  
20 25 30

Lys Ile Lys Ala Arg Asp Leu Arg Gly Lys Lys Lys Glu Glu Leu Leu  
35 40 45

Lys Gln Leu Asp Asp Leu Lys Val Glu Leu Ser Gln Leu Arg Val Ala  
50 55 60

Lys Val Thr Gly Gly Ala Ala Ser Lys Leu Ser Lys Ile Arg Val Val  
65 70 75 80

Arg Lys Ser Ile Ala Arg Val Leu Thr Val Ile Asn Gln Thr Gln Lys  
85 90 95

Glu Asn Leu Arg Lys Phe Tyr Lys Gly Lys Lys Tyr Lys Pro Leu Asp  
100 105 110

Leu Arg Pro Lys Lys Thr Arg Ala Met Arg Arg Arg Leu Asn Lys His  
115 120 125

Glu Glu Asn Leu Lys Thr Lys Lys Gln Gln Arg Lys Glu Arg Leu Tyr  
130 135 140

Pro Leu Arg Lys Tyr Ala Val Lys Ala  
145 150

&lt;210&gt; 1689

&lt;211&gt; 130

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1689

Gly Gly Gly Asp Ala Glu Met Gly Ala Ala Ala Ala Glu Ala Asp Arg  
1 5 10 15

Thr Leu Phe Val Gly Asn Leu Glu Thr Lys Val Thr Glu Glu Leu Leu  
20 25 30

Phe Glu Leu Phe His Gln Ala Gly Pro Val Ile Lys Val Lys Ile Pro  
35 40 45

Lys Asp Lys Asp Gly Lys Pro Lys Gln Phe Ala Phe Val Asn Phe Lys  
50 55 60

His Glu Val Ser Val Pro Tyr Ala Met Asn Leu Leu Asn Gly Ile Lys  
65 70 75 80

Leu Tyr Gly Arg Pro Ile Lys Ile Gln Phe Arg Ser Gly Ser Ser His  
85 90 95

Ala Pro Gln Asp Val Ser Leu Ser Tyr Pro Gln His His Val Gly Asn  
100 105 110

Ser Ser Pro Thr Ser Thr Ser Pro Ser Ala Gly Thr Lys Gly Leu Trp  
115 120 125

Ile Thr  
130

<210> 1690

<211> 172

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (110)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1690

Arg Pro Ser Leu Glu Val Leu Phe Thr Val Ile Leu Thr Lys Ile Thr  
1 5 10 15

Tyr Cys Pro Pro Glu Tyr Gln Val Leu Gly Asp Thr Ser Ser Ser Cys  
20 25 30

Cys Leu Gln Ser Ser Tyr Gln Glu Ala Arg Cys Thr Gly Phe Leu Trp  
35 40 45

Phe Leu Gln Glu Pro Pro Thr Leu Ser Val Phe Trp Pro Arg Ser Gly  
50 55 60

Val Asn Pro Leu Val Ser Ala Phe Glu Leu Asp Thr Cys Ala Phe Ser  
65 70 75 80

Ser Val Asn Thr Ala Leu Phe Gly Gly Val Ser Ser Ser Pro Gln Pro  
85 90 95

Glu Leu Leu Asn Ser Lys Pro Lys Leu Val Ser Ala Glu Xaa Arg Phe  
100 105 110

Gln Asp Ser Pro Val Ser Ile Cys Gly Asp Leu Gln Ile Arg Gln Ser  
115 120 125

Ser Phe Pro Ala Ser Gly Val Leu Ala Pro Glu Pro Ser Leu Arg Leu  
130 135 140

Val Leu Leu Asp Val Leu Ile Ser Asp His Tyr Pro Pro Tyr Ala Ser  
145 150 155 160

His Arg Pro Arg Glu Asn Arg His Gln Asn Leu Gly  
165 170

<210> 1691

<211> 272

<212> PRT

<213> Homo sapiens

<400> 1691

Asn Ser Arg Val His Pro Arg Arg Pro Val Thr Ala Glu Lys Met Ala  
1 5 10 15

Val Leu Ala Pro Leu Ile Ala Leu Val Tyr Ser Val Pro Arg Leu Ser  
20 25 30

Arg Trp Leu Ala Gln Pro Tyr Tyr Leu Leu Ser Ala Leu Leu Ser Ala  
35 40 45

Ala Phe Leu Leu Val Arg Lys Leu Pro Pro Leu Cys His Gly Leu Pro  
50 55 60

Thr Gln Arg Glu Asp Gly Asn Pro Cys Asp Phe Asp Trp Arg Glu Val  
65 70 75 80

Glu Ile Leu Met Phe Leu Ser Ala Ile Val Met Met Lys Asn Arg Arg  
85 90 95

Ser Met Phe Leu Met Thr Cys Lys Pro Pro Leu Tyr Met Gly Pro Glu  
100 105 110

Tyr Ile Lys Tyr Phe Asn Asp Lys Thr Ile Asp Glu Glu Leu Glu Arg  
115 120 125

Asp Lys Arg Val Thr Trp Ile Val Glu Phe Phe Ala Asn Trp Ser Asn  
 130 135 140

Asp Cys Gln Ser Phe Ala Pro Ile Tyr Ala Asp Leu Ser Leu Lys Tyr  
 145 150 155 160

Asn Cys Thr Gly Leu Asn Phe Gly Lys Val Asp Val Gly Arg Tyr Thr  
 165 170 175

Asp Val Ser Thr Arg Tyr Lys Val Ser Thr Ser Pro Leu Thr Lys Gln  
 180 185 190

Leu Pro Thr Leu Ile Leu Phe Gln Gly Gly Lys Glu Ala Met Arg Arg  
 195 200 205

Pro Gln Ile Asp Lys Lys Gly Arg Ala Val Ser Trp Thr Phe Ser Glu  
 210 215 220

Glu Asn Val Ile Arg Glu Phe Asn Leu Asn Glu Leu Tyr Gln Arg Ala  
 225 230 235 240

Lys Lys Leu Ser Lys Ala Gly Asp Asn Ile Pro Glu Glu Gln Pro Val  
 245 250 255

Ala Ser Thr Pro Thr Thr Val Ser Asp Gly Glu Asn Lys Lys Asp Lys  
 260 265 270

<210> 1692

<211> 366

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (8)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1692

Gly Lys Arg Thr Gly Arg Ala Xaa Ala Ser Ser Gly Arg Arg Gly Glu  
 1 5 10 15

Gly Gly Trp Trp Arg Leu Pro Arg Ser Pro Ser Leu Pro Ala Val Pro  
 20 25 30

Thr Pro Gly Thr Met Phe Pro Ala Gly Pro Pro Ser His Ser Leu Leu  
 35 40 45

Arg Leu Pro Leu Leu Gln Leu Leu Leu Leu Val Val Gln Ala Val Gly  
 50 55 60

Arg Gly Leu Gly Arg Ala Ser Pro Ala Gly Gly Pro Leu Glu Asp Val  
 65 70 75 80

Val Ile Glu Arg Tyr His Ile Pro Arg Ala Cys Pro Arg Glu Val Gln  
 85 90 95

Met Gly Asp Phe Val Arg Tyr His Tyr Asn Gly Thr Phe Glu Asp Gly  
 100 105 110

Lys Lys Phe Asp Ser Ser Tyr Asp Arg Asn Thr Leu Val Ala Ile Val  
 115 120 125

Val Gly Val Gly Arg Leu Ile Thr Gly Met Asp Arg Gly Leu Met Gly  
 130 135 140

Met Cys Val Asn Glu Arg Arg Arg Leu Ile Val Pro Pro His Leu Gly  
 145 150 155 160

Tyr Gly Ser Ile Gly Leu Ala Gly Leu Ile Pro Pro Asp Ala Thr Leu  
 165 170 175

Tyr Phe Asp Val Val Leu Leu Asp Val Trp Asn Lys Glu Asp Thr Val  
 180 185 190

Gln Val Ser Thr Leu Leu Arg Pro Pro His Cys Pro Arg Met Val Gln  
 195 200 205

Asp Gly Asp Phe Val Arg Tyr His Tyr Asn Gly Thr Leu Leu Asp Gly  
 210 215 220

Thr Ser Phe Asp Thr Ser Tyr Ser Lys Gly Gly Thr Tyr Asp Thr Tyr  
 225 230 235 240

Val Gly Ser Gly Trp Leu Ile Lys Gly Met Asp Gln Gly Leu Leu Gly  
 245 250 255

Met Cys Pro Gly Glu Arg Arg Lys Ile Ile Ile Pro Pro Phe Leu Ala  
 260 265 270

Tyr Gly Glu Lys Gly Tyr Gly Glu Gly Gly Gln Gly His Lys Gly Lys  
 275 280 285

Phe Arg Arg Arg Gly Lys Asn Gln Ala Ser Thr Tyr Ser Cys Ser Gly  
 290 295 300

Cys Ile Leu His Glu Gly Ile Gln Pro Arg Thr Gln Gly Gly Met Lys  
 305 310 315 320

Ser Thr Leu Gly Ala Thr Lys Lys Gly Cys Phe Gly Arg Ala Trp Trp  
325 330 335

Leu Thr Leu Val Ile Pro Ala Leu Trp Glu Ala Lys Ala Gly Gly Ser  
340 345 350

Arg Gly Gln Glu Ile Glu Thr Thr Val Lys Pro Arg Leu Tyr  
355 360 365

<210> 1693

<211> 361

<212> PRT

<213> Homo sapiens

<400> 1693

Leu Pro Gln Ser Arg Trp Asn Lys Ser Ser Thr Pro Asp Gly Val Pro  
1 5 10 15

Thr Leu Cys Cys Arg Asn Glu Ala Arg Gln Gln Ile Ser Ile Ser Arg  
20 25 30

Met Trp Gly Leu Lys Val Leu Leu Leu Pro Val Val Ser Phe Ala Leu  
35 40 45

Tyr Pro Glu Glu Ile Leu Asp Thr His Trp Glu Leu Trp Lys Lys Thr  
50 55 60

His Arg Lys Gln Tyr Asn Asn Lys Val Asp Glu Ile Ser Arg Arg Leu  
65 70 75 80

Ile Trp Glu Lys Asn Leu Lys Tyr Ile Ser Ile His Asn Leu Glu Ala  
85 90 95

Ser Leu Gly Val His Thr Tyr Glu Leu Ala Met Asn His Leu Gly Asp  
100 105 110

Met Thr Ser Glu Glu Val Val Gln Lys Met Thr Gly Leu Lys Val Pro  
115 120 125

Leu Ser His Ser Arg Ser Asn Asp Thr Leu Tyr Ile Pro Glu Trp Glu  
130 135 140

Gly Arg Ala Pro Asp Ser Val Asp Tyr Arg Lys Lys Gly Tyr Val Thr  
145 150 155 160

Pro Val Lys Asn Gln Gly Gln Cys Gly Ser Cys Trp Ala Phe Ser Ser  
165 170 175

Val Gly Ala Leu Glu Gly Gln Leu Lys Lys Lys Thr Gly Lys Leu Leu  
 180 185 190  
 Asn Leu Ser Pro Gln Asn Leu Val Asp Cys Val Ser Glu Asn Asp Gly  
 195 200 205  
 Cys Gly Gly Gly Tyr Met Thr Asn Ala Phe Gln Tyr Val Gln Lys Asn  
 210 215 220  
 Arg Gly Ile Asp Ser Glu Asp Ala Tyr Pro Tyr Val Gly Gln Glu Glu  
 225 230 235 240  
 Ser Cys Met Tyr Asn Pro Thr Gly Lys Ala Ala Lys Cys Arg Gly Tyr  
 245 250 255  
 Arg Glu Ile Pro Glu Gly Asn Glu Lys Ala Leu Lys Arg Ala Val Ala  
 260 265 270  
 Arg Val Gly Pro Val Ser Val Ala Ile Asp Ala Ser Leu Thr Ser Phe  
 275 280 285  
 Gln Phe Tyr Ser Lys Gly Val Tyr Tyr Asp Glu Ser Cys Asn Ser Asp  
 290 295 300  
 Asn Leu Asn His Ala Val Leu Ala Val Gly Tyr Gly Ile Gln Lys Gly  
 305 310 315 320  
 Asn Lys His Trp Ile Ile Lys Asn Ser Trp Gly Glu Asn Trp Gly Asn  
 325 330 335  
 Lys Gly Tyr Ile Leu Met Ala Arg Asn Lys Asn Asn Ala Cys Gly Ile  
 340 345 350  
 Ala Asn Leu Ala Ser Phe Pro Lys Met  
 355 360

<210> 1694

<211> 282

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (20)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1694

Pro Arg Val Arg Arg Gly Pro Arg Val Ser Ser Met Ala Ser Ala Asp  
 1 5 10 15



Ser Arg Arg Xaa Ala Asp Gly Gly Gly Ala Gly Gly Thr Phe Gln Pro  
20 25 30

Tyr Leu Asp Thr Leu Arg Gln Glu Leu Gln Gln Thr Asp Pro Thr Leu  
35 40 45

Leu Ser Val Val Val Ala Val Leu Ala Val Leu Leu Thr Leu Val Phe  
50 55 60

Trp Lys Leu Ile Arg Ser Arg Arg Ser Ser Gln Arg Ala Val Leu Leu  
65 70 75 80

Val Gly Leu Cys Asp Ser Gly Lys Thr Leu Leu Phe Val Arg Leu Leu  
85 90 95

Thr Gly Leu Tyr Arg Asp Thr Gln Thr Ser Ile Thr Asp Ser Cys Ala  
100 105 110

Val Tyr Arg Val Asn Asn Asn Arg Gly Asn Ser Leu Thr Leu Ile Asp  
115 120 125

Leu Pro Gly His Glu Ser Leu Arg Leu Gln Phe Leu Glu Arg Phe Lys  
130 135 140

Ser Ser Ala Arg Ala Ile Val Phe Val Val Asp Ser Ala Ala Phe Gln  
145 150 155 160

Arg Glu Val Lys Asp Val Ala Glu Phe Leu Tyr Gln Val Leu Ile Asp  
165 170 175

Ser Met Gly Leu Lys Asn Thr Pro Ser Phe Leu Ile Ala Cys Asn Lys  
180 185 190

Gln Asp Ile Ala Met Ala Lys Ser Ala Lys Leu Ile Gln Gln Gln Leu  
195 200 205

Glu Lys Glu Leu Asn Thr Leu Arg Val Thr Arg Ser Ala Ala Pro Ser  
210 215 220

Thr Leu Asp Ser Ser Ser Thr Ala Pro Ala Gln Leu Gly Lys Lys Gly  
225 230 235 240

Lys Glu Phe Glu Phe Ser Gln Leu Pro Leu Lys Val Glu Phe Leu Glu  
245 250 255

Cys Ser Ala Lys Gly Gly Arg Gly Asp Val Gly Ser Ala Asp Ile Gln  
260 265 270

Asp Leu Glu Lys Trp Leu Ala Lys Ile Ala  
275 280

<210> 1695  
<211> 232  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (113)  
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1695  
Gly Val Asp Thr Ser Pro Phe Ala Lys Ser Leu Gly His Ser Arg Gly  
1 5 10 15  
Glu Ala Asp Leu Phe Asp Ser Gly Asp Ile Phe Ser Thr Gly Thr Gly  
20 25 30  
Ser Gln Ser Val Glu Arg Thr Lys Pro Lys Ala Lys Ile Ala Glu Asn  
35 40 45  
Pro Ala Asn Pro Pro Val Gly Gly Lys Ala Lys Ser Pro Met Phe Pro  
50 55 60  
Ala Leu Gly Glu Ala Ser Ser Asp Asp Asp Leu Phe Gln Ser Ala Lys  
65 70 75 80  
Pro Lys Pro Ala Lys Lys Thr Asn Pro Phe Pro Leu Leu Glu Asp Glu  
85 90 95  
Asp Asp Leu Phe Thr Asp Gln Lys Val Lys Lys Asn Glu Thr Lys Ser  
100 105 110  
Xaa Ser Gln Gln Asp Val Ile Leu Thr Thr Gln Asp Ile Phe Glu Asp  
115 120 125  
Asp Ile Phe Ala Thr Glu Ala Ile Lys Pro Ser Gln Lys Thr Arg Glu  
130 135 140  
Lys Glu Lys Thr Leu Glu Ser Asn Leu Phe Asp Asp Asn Ile Asp Ile  
145 150 155 160  
Phe Ala Asp Leu Thr Val Lys Pro Lys Glu Lys Ser Lys Lys Lys Val  
165 170 175  
Glu Ala Lys Ser Ile Phe Asp Asp Asp Met Asp Asp Ile Phe Ser Ser  
180 185 190  
Gly Ile Gln Ala Lys Thr Thr Lys Pro Lys Ser Arg Ser Ala Gln Ala

195

200

205

Ala Pro Glu Pro Arg Phe Glu His Lys Val Ser Asn Ile Phe Asp Asp  
210 215 220

Pro Leu Asn Ala Phe Gly Gly Gln  
225 230

&lt;210&gt; 1696

&lt;211&gt; 123

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1696

Arg Gly Gly Ser Pro Glu Val Ser Gly Asn Gly Ala Ala Leu Phe Glu  
1 5 10 15

Met Phe Ser Tyr Leu Ile Leu Cys Pro Ser Arg Gly Ser Ser Leu Ile  
20 25 30

Cys Leu Ala Trp Pro Cys Val Pro Pro Val Pro Cys Ser Thr Ala Tyr  
35 40 45

Leu Val Pro Gln Val Leu Leu Ala Thr Pro Ala Val Thr Leu Asn Ser  
50 55 60

Phe Asn Ser Ala Leu Asn Ala Pro Ala Ser Glu Ala Cys Pro Ile Ser  
65 70 75 80

Phe Phe Leu Ala Ser Val Phe Phe Phe Ser Phe Phe Phe Pro Cys Phe  
85 90 95

Cys Arg Arg Leu Arg Gly Glu Ser Phe Leu Trp Leu Pro Leu Leu Arg  
100 105 110

Leu Glu Leu Glu Glu Asn Leu Ile Phe Cys Ile  
115 120

&lt;210&gt; 1697

&lt;211&gt; 272

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (256)

&lt;223&gt; xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (258)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (262)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (263)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (267)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 1697

Pro Ala Pro Ala Ala His Val Ala Gly Asn Pro Gly Gly Asp Ala Ala  
1 5 10 15

Pro Ala Ala Thr Gly Thr Ala Ala Ala Ser Leu Ala Thr Ala Ala  
20 25 30

Gly Ser Glu Asp Ala Glu Lys Lys Val Leu Ala Thr Lys Val Leu Gly  
35 40 45

Thr Val Lys Trp Phe Asn Val Arg Asn Gly Tyr Gly Phe Ile Asn Arg  
50 55 60

Asn Asp Thr Lys Glu Asp Val Phe Val His Gln Thr Ala Ile Lys Lys  
65 70 75 80

Asn Asn Pro Arg Lys Tyr Leu Arg Ser Val Gly Asp Gly Glu Thr Val  
85 90 95

Glu Phe Asp Val Val Glu Gly Glu Lys Gly Ala Glu Ala Ala Asn Val  
100 105 110

Thr Gly Pro Asp Gly Val Pro Val Glu Gly Ser Arg Tyr Ala Ala Asp  
115 120 125

Arg Arg Arg Tyr Arg Arg Gly Tyr Tyr Gly Arg Arg Arg Gly Pro Pro  
130 135 140

Arg Asn Ala Gly Glu Ile Gly Glu Met Lys Asp Gly Val Pro Glu Gly  
145 150 155 160

Ala Gln Leu Gln Gly Pro Val His Arg Asn Pro Thr Tyr Arg Pro Arg  
 165 170 175

Tyr Arg Ser Arg Gly Pro Pro Arg Pro Arg Pro Ala Pro Ala Val Gly  
 180 185 190

Glu Ala Glu Asp Lys Glu Asn Gln Gln Ala Thr Ser Gly Pro Asn Gln  
 195 200 205

Pro Ser Val Arg Arg Gly Tyr Arg Arg Pro Tyr Asn Tyr Arg Arg Arg  
 210 215 220

Pro Arg Pro Pro Asn Ala Pro Ser Gln Asp Gly Lys Glu Ala Lys Ala  
 225 230 235 240

Gly Glu Ala Pro Thr Glu Asn Pro Ala Pro Pro Thr Ser Arg Ala Xaa  
 245 250 255

Leu Xaa Asn Thr Arg Xaa Xaa Arg His Leu Xaa His Arg Gln Val Thr  
 260 265 270

<210> 1698  
 <211> 88  
 <212> PRT  
 <213> Homo sapiens

<400> 1698

Arg Glu Thr Ala Cys Cys Gly Arg Asp Ala Arg Gly Ala Ala Pro Ala  
 1 5 10 15

Ala Met Ala Val Thr Ala Leu Ala Ala Arg Thr Trp Leu Gly Val Trp  
 20 25 30

Gly Val Arg Thr Met Gln Ala Arg Gly Phe Gly Ser Asp Gln Ser Glu  
 35 40 45

Asn Val Asp Arg Gly Ala Gly Ser Ile Arg Glu Ala Gly Gly Ala Phe  
 50 55 60

Gly Lys Arg Glu Gln Ala Glu Glu Glu Arg Tyr Phe Arg His Tyr Arg  
 65 70 75 80

Leu Cys Phe Glu Ile Ser Leu Gly  
 85